

VBCCMessages

COLLABORATORS

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Chapter 1

VBCCMessages

1.1 vbcc - Errors & Warnings

- 0 "declaration expected" (Fatal, Error, ANSI-violation)
 - 1 "only one input file allowed" (Fatal)
 - 2 "Flag <%s> specified more than once" ()
 - 3 "Flag <%s> needs string" (Fatal)
 - 4 "Flag <%s> needs value" (Fatal)
 - 5 "Unknown Flag <%s>" (Fatal)
 - 6 "No input file" (Fatal)
 - 7 "Could not open <%s> for input" (Fatal)
 - 8 "need a struct or union to get a member" (Error, ANSI-violation)
 - 9 "too many (%d) nested blocks" (Fatal, Error)
 - 10 "left block 0" (Error, ANSI-violation)
 - 11 "uncomplete struct <%s>" (Error, ANSI-violation)
 - 12 "out of memory" (Fatal, Error)
 - 13 "redeclaration of struct <%s>" (Error, ANSI-violation)
 - 14 "uncomplete type (%s) in struct" (Error, ANSI-violation)
 - 15 "function (%s) in struct/union" (Error, ANSI-violation)
 - 16 "redeclaration of struct/union member <%s>" (Error, ANSI-violation)
 - 17 "redeclaration of <%s>" (Error, ANSI-violation)
 - 18 "invalid constant expression" (Error, ANSI-violation)
 - 19 "array dimension must be constant integer" (Error, ANSI-violation)
 - 20 "no declarator and no identifier in prototype" (Error, ANSI-violation)
 - 21 "invalid storage-class in prototype" (Error, ANSI-violation)
 - 22 "void not the only function argument" (Error, ANSI-violation)
 - 23 "<%s> no member of struct/union" (Error, ANSI-violation)
 - 24 "increment/decrement is only allowed for arithmetic and pointer types" (Error, ANSI-violation)
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- 25 "functions may not return arrays or functions" (Error, ANSI-violation)
 - 26 "only pointers to functions can be called" (Error, ANSI-violation)
 - 27 "redefinition of var <%s>" (Error, ANSI-violation)
 - 28 "redeclaration of var <%s> with new storage-class" (Error, ANSI-violation)
 - 29 "first operand of conditional-expression must be arithmetic or pointer type" (Error, ANSI-violation)
 - 30 "multiple definitions of var <%s>" (Error, ANSI-violation)
 - 31 "operands of : do not match" (Error, ANSI-violation)
 - 32 "function definition in inner block" (Error, ANSI-violation)
 - 33 "redefinition of function <%s>" (Error, ANSI-violation)
 - 34 "invalid storage-class for function" (Error, ANSI-violation)
 - 35 "declaration-specifiers expected" (Error, ANSI-violation)
 - 36 "declarator expected" (Error, ANSI-violation)
 - 37 "<%s> is no parameter" (Error, ANSI-violation)
 - 38 "assignment of different structs/unions" (Error, ANSI-violation)
 - 39 "invalid types for assignment" (Error, ANSI-violation)
 - 40 "only 0 can be compared against pointer" (Warning, ANSI-violation)
 - 41 "pointers do not point to the same type" (Warning, ANSI-violation)
 - 42 "function initialized" (Error, ANSI-violation)
 - 43 "initialization of uncomplete struct" (Error, ANSI-violation)
 - 44 "initialization of uncomplete union" (Error, ANSI-violation)
 - 45 "empty initialization" (Error, ANSI-violation)
 - 46 "initializer not a constant" (Error, ANSI-violation)
 - 47 "double type-specifier" (Warning, ANSI-violation)
 - 48 "illegal type-specifier" (Warning, ANSI-violation)
 - 49 "multiple storage-classes" (Warning, ANSI-violation)
 - 50 "storage-class specifier should be first" (Warning, ANSI-violation)
 - 51 "bitfields must be ints" (Warning, ANSI-violation)
 - 52 "bitfield width must be constant integer" (Warning, ANSI-violation)
 - 53 "struct/union member needs identifier" (Warning, ANSI-violation)
 - 54 "; expected" (Warning, ANSI-violation)
 - 55 "struct/union has no members" (Warning, ANSI-violation)
 - 56 "}" expected" (Warning, ANSI-violation)
 - 57 ", expected" (Warning, ANSI-violation)
 - 58 "invalid unsigned" (Warning, ANSI-violation)
 - 59 ") expected" (Warning, ANSI-violation)
 - 60 "array dimension has sidefx (will be ignored)" (Warning, ANSI-violation)
 - 61 "array of size 0 (set to 1)" (Warning, ANSI-violation)
 - 62 "]" expected" (Warning, ANSI-violation)
 - 63 "mixed identifier- and parameter-type-list" (Warning, ANSI-violation)
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64 "var <%s> was never assigned a value" (Warning)
65 "var <%s> was never used" (Warning)
66 "invalid storage-class" (Warning, ANSI-violation)
67 "type defaults to int" (Warning)
68 "redeclaration of var <%s> with new type" (Warning, ANSI-violation)
69 "redeclaration of parameter <%s>" (Warning, ANSI-violation)
70 ": expected" (Warning, ANSI-violation)
71 "illegal escape-sequence in string" (Warning, ANSI-violation)
72 "character constant contains multiple chars" (Warning)
73 "could not evaluate sizeof-expression" (Error, ANSI-violation)
74 "" expected (unterminated string)" (Error, ANSI-violation)
75 "something wrong with numeric constant" (Error, ANSI-violation)
76 "identifier expected" (Fatal, Error, ANSI-violation)
77 "definition does not match previous declaration" (Warning, ANSI-violation)
78 "integer added to illegal pointer" (Warning, ANSI-violation)
79 "offset equals size of object" (Warning)
80 "offset out of object" (Warning, ANSI-violation)
81 "only 0 should be cast to pointer" (Warning)
82 "unknown identifier <%s>" (Error, ANSI-violation)
83 "too few function arguments" (Warning, ANSI-violation)
84 "division by zero (result set to 0)" (Warning, ANSI-violation)
85 "assignment of different pointers" (Warning, ANSI-violation)
86 "lvalue required for assignment" (Error, ANSI-violation)
87 "assignment to constant type" (Error, ANSI-violation)
88 "assignment to uncomplete type" (Error, ANSI-violation)
89 "operands for || and && have to be arithmetic or pointer" (Error, ANSI-violation)
90 "bitwise operations need integer operands" (Error, ANSI-violation)
91 "assignment discards const" (Warning, ANSI-violation)
92 "relational expression needs arithmetic or pointer type" (Error, ANSI-violation)
93 "need arithmetic type to test against pointer" (Error, ANSI-violation)
94 "operand needs arithmetic type" (Error, ANSI-violation)
95 "pointer arithmetic with void * is not possible" (Error, ANSI-violation)
96 "pointers can only be subtracted" (Error, ANSI-violation)
97 "invalid types for operation <%s>" (Error, ANSI-violation)
98 "invalid operand type" (Error, ANSI-violation)
99 "integer-pointer is not allowed" (Error, ANSI-violation)
100 "assignment discards volatile" (Warning, ANSI-violation)
101 "<<, >> and % need integer operands" (Error, ANSI-violation)
102 "casting from void is not allowed" (Error, ANSI-violation)

103 "integer too large to fit into pointer" (Error, ANSI-violation)
104 "only integers can be cast to pointers" (Error, ANSI-violation)
105 "invalid cast" (Error, ANSI-violation)
106 "pointer too large to fit into integer" (Error, ANSI-violation)
107 "unary operator needs arithmetic type" (Error, ANSI-violation)
108 "negation type must be arithmetic or pointer" (Error, ANSI-violation)
109 "complement operator needs integer type" (Error, ANSI-violation)
110 "pointer assignment with different qualifiers" (Warning, ANSI-violation)
111 "dereferenced object is no pointer" (Error, ANSI-violation)
112 "dereferenced object is uncomplete" (Error, ANSI-violation)
113 "only 0 should be assigned to pointer" (Warning, ANSI-violation)
114 "typedef <%s> is initialized" (Warning, ANSI-violation)
115 "lvalue required to take address" (Error, ANSI-violation)
116 "unknown var <%s>" (Error, ANSI-violation)
117 "address of register variables not available" (Error, ANSI-violation)
118 "var <%s> initialized after 'extern'" (Warning, ANSI-violation)
119 "const var <%s> not initialized" (Warning)
120 "function definition after 'extern'" (Warning, ANSI-violation)
121 "return type of main is not int" (Warning, ANSI-violation)
122 "invalid storage-class for function parameter" (Warning, ANSI-violation)
123 "formal parameters conflict with parameter-type-list" (Warning, ANSI-violation)
124 "parameter type defaults to int" (Warning)
125 "no declaration-specifier, used int" (Warning, ANSI-violation)
126 "no declarator in prototype" (Warning, ANSI-violation)
127 "static var <%s> never defined" (Warning)
128 "} expected" (Warning)
129 "left operand of comma operator has no side-effects" (Warning)
130 "label empty" (Error, ANSI-violation)
131 "redefinition of label <%s>" (Error, ANSI-violation)
132 "case without switch" (Error, ANSI-violation)
133 "case-expression must be constant" (Error, ANSI-violation)
134 "case-expression must be integer" (Error, ANSI-violation)
135 "empty if-expression" (Error, ANSI-violation)
136 "if-expression must be arithmetic or pointer" (Error, ANSI-violation)
137 "empty switch-expression" (Error, ANSI-violation)
138 "switch-expression must be integer" (Error, ANSI-violation)
139 "multiple default labels" (Error, ANSI-violation)
140 "while-expression must be arithmetic or pointer" (Error, ANSI-violation)
141 "empty while-expression" (Error, ANSI-violation)

142 "for-expression must be arithmetic or pointer" (Error, ANSI-violation)
143 "do-while--expression must be arithmetic or pointer" (Error, ANSI-violation)
144 "goto without label" (Error, ANSI-violation)
145 "continue not within loop" (Error, ANSI-violation)
146 "break not in matching construct" (Error, ANSI-violation)
147 "label <%s> was never defined" (Error, ANSI-violation)
148 "label <%s> was never used" (Warning)
149 "register %s not ok" (Warning)
150 "default not in switch" (Warning, ANSI-violation)
151 "(expected" (Warning, ANSI-violation)
152 "loop eliminated" (Warning)
153 "statement has no effect" (Warning)
154 "'while' expected" (Warning, ANSI-violation)
155 "function should not return a value" (Warning)
156 "function should return a value" (Warning, ANSI-violation)
157 "{ expected" (Warning, ANSI-violation)
158 "internal error %d in line %d of file %s !!" (Fatal, Error)
159 "there is no message number %d" (Fatal)
160 "message number %d cannot be suppressed" (Fatal)
161 "implicit declaration of function <%s>" (Warning)
162 "function call without prototype in scope" (Warning)
163 "#pragma used" (Warning)
164 "assignment in comparison context" (Warning)
165 "comparison redundant because operand is unsigned" (Warning)
166 "cast to narrow type may cause loss of precision" (Warning)
167 "pointer cast may cause alignment problems" (Warning)
168 "no declaration of global variable <%s> before definition" (Warning)
169 "'extern' inside function" (Warning)
170 "dead assignment to <%s> eliminated" (Warning)
171 "var <%s> is used before defined" (Warning)
172 "would need more than %ld optimizer passes for best results" (Warning)
173 "function <%s> has no return statement" (Warning)
174 "function <main> has no return statement" (Warning)
175 "this code is weird" (Warning)
176 "size of incomplete type not available" (Warning, ANSI-violation)
177 "line too long" (FATAL, Error, ANSI-violation, Preprocessor)
178 "identifier must begin with a letter or underscore" (FATAL, Error, ANSI-violation, Preprocessor)
179 "cannot redefine macro" (Error, ANSI-violation, Preprocessor)
180 "missing) after argumentlist" (Error, ANSI-violation, Preprocessor)

181 "identifier expected" (Error, ANSI-violation, Preprocessor)
182 "illegal character in identifier" (Error, ANSI-violation, Preprocessor)
183 "missing operand before/after ##" (Error, ANSI-violation, Preprocessor)
184 "no macro-argument after #-operator" (Error, ANSI-violation, Preprocessor)
185 "macro redefinition not allowed" (Error, ANSI-violation, Preprocessor)
186 "unexpected end of file (unterminated comment)" (FATAL, Error, Preprocessor)
187 "too many nested includes" (FATAL, Error, Preprocessor)
188 "#else without #if/#ifdef/#ifndef" (FATAL, Error, ANSI-violation, Preprocessor)
189 "#else after #else" (Error, ANSI-violation, Preprocessor)
190 "#endif without #if" (Error, ANSI-violation, Preprocessor)
191 "cannot include file" (FATAL, Error, Preprocessor)
192 "expected \" or < in #include-directive" (Error, ANSI-violation, Preprocessor)
193 "unknown #-directive" (Warning, Preprocessor)
194 "wrong number of macro arguments" (Error, ANSI-violation, Preprocessor)
195 "macro argument expected" (Error, ANSI-violation, Preprocessor)
196 "out of memory" (FATAL, Error, Preprocessor)
197 "macro redefinition" (Warning, Preprocessor)
198 "/* in comment" (Warning, Preprocessor)
199 "cannot undefine macro" (Error, ANSI-violation, Preprocessor)
200 "characters after #-directive ignored" (Warning, Preprocessor)
201 "duplicate case labels" (Warning, ANSI-violation)
202 "var <%s> is incomplete" (Warning, ANSI-violation)
203 "long float is no longer valid" (Warning, ANSI-violation)
204 "long double is not really supported by vbcc" (Warning)
205 "empty struct-declarations are not yet handled correct" (Warning)
206 "identifier too long (only %d characters are significant)" (Warning)
207 "illegal initialization of var <%s>" (Warning, ANSI-violation)
208 "suspicious loop" (Warning)
209 "ansi/iso-mode turned on" (Warning)
210 "division by zero (result set to 0)" (Warning, ANSI-violation)
211 "constant out of range" (Warning, ANSI-violation)
212 "constant is unsigned due to size" (Warning)
213 "varargs function called without prototype in scope" (Warning)
214 "suspicious format string" (Warning)
215 "format string contains '\\0'" (Warning)
216 "illegal use of keyword <%s>" (Warning, ANSI-violation)

1.2 Error 0

"declaration expected" "(Fatal, Error, ANSI-violation)"

Something is pretty wrong with the source.

1.3 Error 1

"only one input file allowed" "(Fatal)"

vbcc accepts only a single filename to compile. You can use a frontend to compile multiple files or perhaps you mistyped an option.

1.4 Error 2

"Flag <%s> specified more than once" "()"

You specified a command line option that should be specified only once more than once. Maybe you have this option in your config-file and used it in the command line, too?

The first occurrence will override the later ones.

1.5 Error 3

"Flag <%s> needs string" "(Fatal)"

This option has to be specified with a string parameter, e.g. -flag=foobar

1.6 Error 4

"Flag <%s> needs value" "(Fatal)"

This option has to be specified with an integer parameter, e.g. -flag=1234

1.7 Error 5

"Unknown Flag <%s>" "(Fatal)"

This option is not recognized by vbcc. Perhaps you mistyped it, used the wrong case or specified an option of the frontend to vbcc?

1.8 Error 6

"No input file" "(Fatal)"

You did not specify an input file. Your source file should not start with a '-' and if you use a frontend make sure it has the proper suffix.

1.9 Error 7

"Could not open <%s> for input" "(Fatal)"

A file could not be opened.

1.10 Error 8

"need a struct or union to get a member" "(Error, ANSI-violation)"

The source contains something like a.b where a is not a structure or union.

1.11 Error 9

"too many (%d) nested blocks" "(Fatal, Error)"

vbcc only allows a maximum number of nested blocks (compound-statements). You can increase this number by changing the line

```
#define MAXN <something>
```

in vbc.h and recompiling vbcc.

1.12 Error 10

"left block 0" "(Error, ANSI-violation)"

This error should not occur.

1.13 Error 11

"uncomplete struct <%s>" "(Error, ANSI-violation)"

You tried to get a member of an uncomplete structure/union. You defined

```
struct x y;
```

somewhere without defining

```
struct x {...}.
```

1.14 Error 12

"out of memory" "(Fatal, Error)"

Guess what.

1.15 Error 13

"redeclaration of struct <%s>" "(Error, ANSI-violation)"

You may not redeclare a struct/union in the same block.

1.16 Error 14

"uncomplete type (%s) in struct" "(Error, ANSI-violation)"

Every member in a struct/union declaration must be complete.

Perhaps you only wanted a pointer to that type and forgot the '*'?

1.17 Error 15

"function (%s) in struct/union" "(Error, ANSI-violation)"

Functions cannot be members of structs/unions.

1.18 Error 16

"redeclaration of struct/union member <%s>" "(Error, ANSI-violation)"

Two members of a struct/union have the same name.

1.19 Error 17

"redeclaration of <%s>" "(Error, ANSI-violation)"

You used a name already in use in an enumeration.

1.20 Error 18

"invalid constant expression" "(Error, ANSI-violation)"

??? Nowhere to find...

1.21 Error 19

"array dimension must be constant integer" "(Error, ANSI-violation)"

The dimensions of an array must be constants (real constants, `const int x=100; int y[x];` is not allowed) and integers (`int y[100.0];` is not allowed either).

1.22 Error 20

"no declarator and no identifier in prototype" "(Error, ANSI-violation)"

1.23 Error 21

"invalid storage-class in prototype" "(Error, ANSI-violation)"

Function parameters may only be `auto` or `register`.

1.24 Error 22

"void not the only function argument" "(Error, ANSI-violation)"

You tried to declare a function that has an argument of type `void` as well as other arguments.

1.25 Error 23

"<%s> no member of struct/union" "(Error, ANSI-violation)"

The struct/union does not contain a member called like that.

1.26 Error 24

"increment/decrement is only allowed for arithmetic and pointer types" "(Error, ANSI-violation)"

1.27 Error 25

"functions may not return arrays or functions" "(Error, ANSI-violation)"

1.28 Error 26

"only pointers to functions can be called" "(Error, ANSI-violation)"

You tried to call something that did not decay into a pointer to a function.

1.29 Error 27

"redefinition of var <%s>" "(Error, ANSI-violation)"

1.30 Error 28

"redeclaration of var <%s> with new storage-class" "(Error, ANSI-violation)"

1.31 Error 29

"first operand of conditional-expression must be arithmetic or pointer type" "(Error, ANSI-violation)"

1.32 Error 30

"multiple definitions of var <%s>" "(Error, ANSI-violation)"

There have been multiple definitions of a global variable with initialization.

1.33 Error 31

"operands of : do not match" "(Error, ANSI-violation)"

In an expression of the form `a ? b : c`

- a and b must have the same type or
 - a and b both must have arithmetic types or
 - one of them must be a pointer and the other must be void * or 0
-

1.34 Error 32

"function definition in inner block" "(Error, ANSI-violation)"

C does not allow nested functions.

1.35 Error 33

"redefinition of function <%s>" "(Error, ANSI-violation)"

Defining two functions with the same name in one translation-unit is no good idea.

1.36 Error 34

"invalid storage-class for function" "(Error, ANSI-violation)"

Functions must not have storage-classes register or auto.

1.37 Error 35

"declaration-specifiers expected" "(Error, ANSI-violation)"

1.38 Error 36

"declarator expected" "(Error, ANSI-violation)"

1.39 Error 37

"<%s> is no parameter" "(Error, ANSI-violation)"

In an old-style function definition you tried to declare a name as a parameter which was not in the identifier-list.

1.40 Error 38

"assignment of different structs/unions" "(Error, ANSI-violation)"

1.41 Error 39

"invalid types for assignment" "(Error, ANSI-violation)"

In an assignment-context (this includes passing arguments to prototyped functions) the source and target must be one of the following types:

- both are arithmetic types
 - both are the same struct/union
 - one of them is a pointer to void and the other one is any pointer
-

- the target is any pointer and the source is an integral constant-expression with the value 0
 - both are pointer to the same type (here the target may have additional const/volatile qualifiers - not recursively, however)
- Any other combinations should be illegal.

1.42 Warning 40

"only 0 can be compared against pointer" "(Warning, ANSI-violation)"

You may not compare a pointer against any other constant but a 0 (null pointer).

1.43 Warning 41

"pointers do not point to the same type" "(Warning, ANSI-violation)"

You tried to compare or assign pointers that point to different types. E.g. the types they point to may have different attributes.

1.44 Error 42

"function initialized" "(Error, ANSI-violation)"

There was a '=' after a function declaration.

1.45 Error 43

"initialization of uncomplete struct" "(Error, ANSI-violation)"

A structure is uncomplete if only its name, but not the content is known. You cannot do much with such structures.

1.46 Error 44

"initialization of uncomplete union" "(Error, ANSI-violation)"

A union is uncomplete if only its name, but not the content is known. You cannot do much with such unions.

1.47 Error 45

"empty initialization" "(Error, ANSI-violation)"

There was no valid expression after the '=' in a variable definition.

1.48 Error 46

"initializer not a constant" "(Error, ANSI-violation)"

Static variables and compound types may only be initialized with constants.

Variables with const qualifier are no valid constant-expressions here.

Addresses of static variables are ok, but casting them may turn them into non-constant-expressions.

1.49 Warning 47

"double type-specifier" "(Warning, ANSI-violation)"

1.50 Warning 48

"illegal type-specifier" "(Warning, ANSI-violation)"

1.51 Warning 49

"multiple storage-classes" "(Warning, ANSI-violation)"

1.52 Warning 50

"storage-class specifier should be first" "(Warning, ANSI-violation)"

1.53 Warning 51

"bitfields must be ints" "(Warning, ANSI-violation)"

1.54 Warning 52

"bitfield width must be constant integer" "(Warning, ANSI-violation)"

1.55 Warning 53

"struct/union member needs identifier" "(Warning, ANSI-violation)"

1.56 Warning 54

"; expected" "(Warning, ANSI-violation)"

Probably you forgot a ';' or there is a syntactic error in an expression.

1.57 Warning 55

"struct/union has no members" "(Warning, ANSI-violation)"

You defined an empty struct or union.

1.58 Warning 56

"} expected" "(Warning, ANSI-violation)"

1.59 Warning 57

", expected" "(Warning, ANSI-violation)"

1.60 Warning 58

"invalid unsigned" "(Warning, ANSI-violation)"

1.61 Warning 59

") expected" "(Warning, ANSI-violation)"

1.62 Warning 60

"array dimension has sidefx (will be ignored)" "(Warning, ANSI-violation)"

1.63 Warning 61

"array of size 0 (set to 1)" "(Warning, ANSI-violation)"

ANSI C does not allow arrays or any objects to have a size of 0.

1.64 Warning 62

"] expected" "(Warning, ANSI-violation)"

1.65 Warning 63

"mixed identifier- and parameter-type-list" "(Warning, ANSI-violation)"

1.66 Warning 64

"var <%s> was never assigned a value" "(Warning)"

1.67 Warning 65

"var <%s> was never used" "(Warning)"

1.68 Warning 66

"invalid storage-class" "(Warning, ANSI-violation)"

1.69 Warning 67

"type defaults to int" "(Warning)"

1.70 Warning 68

"redeclaration of var <%s> with new type" "(Warning, ANSI-violation)"

1.71 Warning 69

"redeclaration of parameter <%s>" "(Warning, ANSI-violation)"

1.72 Warning 70

": expected" "(Warning, ANSI-violation)"

1.73 Warning 71

"illegal escape-sequence in string" "(Warning, ANSI-violation)"

1.74 Warning 72

"character constant contains multiple chars" "(Warning)"

1.75 Error 73

"could not evaluate sizeof-expression" "(Error, ANSI-violation)"

1.76 Error 74

"" expected (unterminated string)" "(Error, ANSI-violation)"

1.77 Error 75

"something wrong with numeric constant" "(Error, ANSI-violation)"

1.78 Error 76

"identifier expected" "(Fatal, Error, ANSI-violation)"

1.79 Warning 77

"definition does not match previous declaration" "(Warning, ANSI-violation)"

1.80 Warning 78

"integer added to illegal pointer" "(Warning, ANSI-violation)"

1.81 Warning 79

"offset equals size of object" "(Warning)"

1.82 Warning 80

"offset out of object" "(Warning, ANSI-violation)"

1.83 Warning 81

"only 0 should be cast to pointer" "(Warning)"

1.84 Error 82

"unknown identifier <%s>" "(Error, ANSI-violation)"

1.85 Warning 83

"too few function arguments" "(Warning, ANSI-violation)"

1.86 Warning 84

"division by zero (result set to 0)" "(Warning, ANSI-violation)"

1.87 Warning 85

"assignment of different pointers" "(Warning, ANSI-violation)"

1.88 Error 86

"lvalue required for assignment" "(Error, ANSI-violation)"

1.89 Error 87

"assignment to constant type" "(Error, ANSI-violation)"

1.90 Error 88

"assignment to uncomplete type" "(Error, ANSI-violation)"

1.91 Error 89

"operands for || and && have to be arithmetic or pointer" "(Error, ANSI-violation)"

1.92 Error 90

"bitwise operations need integer operands" "(Error, ANSI-violation)"

1.93 Warning 91

"assignment discards const" "(Warning, ANSI-violation)"

You assigned something like (const type *) to (type *).

1.94 Error 92

"relational expression needs arithmetic or pointer type" "(Error, ANSI-violation)"

1.95 Error 93

"both operands of comparison must be pointers" "(Error, ANSI-violation)"

You wrote an expression like `a == b` where one operand was a pointer while the other was not. Perhaps a function is not declared correctly or you used `NULL` instead of `0`?

1.96 Error 94

"operand needs arithmetic type" "(Error, ANSI-violation)"

1.97 Error 95

"pointer arithmetic with void * is not possible" "(Error, ANSI-violation)"

Adding/subtracting from a pointer to void is not possible.

1.98 Error 96

"pointers can only be subtracted" "(Error, ANSI-violation)"

You cannot add, multiply etc. two pointers.

1.99 Error 97

"invalid types for operation <%s>" "(Error, ANSI-violation)"

1.100 Error 98

"invalid operand type" "(Error, ANSI-violation)"

1.101 Error 99

"integer-pointer is not allowed" "(Error, ANSI-violation)"

You may not subtract a pointer from an integer. Adding an integer or subtracting it from a pointer is ok.

1.102 Warning 100

"assignment discards volatile" "(Warning, ANSI-violation)"

You assigned something like (volatile type *) to (type *).

1.103 Error 101

"<<, >> and % need integer operands" "(Error, ANSI-violation)"

1.104 Error 102

"casting from void is not allowed" "(Error, ANSI-violation)"

Casting something of type void to anything makes no sense.

1.105 Error 103

"integer too large to fit into pointer" "(Error, ANSI-violation)"

You tried to assign an integer to a pointer that is too small to hold the integer.

Note that assignment of pointers<->integers is never portable.

1.106 Error 104

"only integers can be cast to pointers" "(Error, ANSI-violation)"

1.107 Error 105

"invalid cast" "(Error, ANSI-violation)"

1.108 Error 106

"pointer too large to fit into integer" "(Error, ANSI-violation)"

You tried to assign a pointer to an integer that is too small to hold the pointer.

Note that assignment of pointers<->integers is never portable.

1.109 Error 107

"unary operator needs arithmetic type" "(Error, ANSI-violation)"

1.110 Error 108

"negation type must be arithmetic or pointer" "(Error, ANSI-violation)"

1.111 Error 109

"complement operator needs integer type" "(Error, ANSI-violation)"

1.112 Warning 110

"pointer assignment with different qualifiers" "(Warning, ANSI-violation)"

You tried to assign a pointer to a pointer that points to a type with different qualifiers (e.g. signed<->unsigned).

1.113 Error 111

"dereferenced object is no pointer" "(Error, ANSI-violation)"

1.114 Error 112

"dereferenced object is uncomplete" "(Error, ANSI-violation)"

You tried to dereference a pointer to an uncomplete object.

Either you had a pointer to an array of unknown size or a pointer to a struct or union that was not (yet) defined.

1.115 Warning 113

"only 0 should be assigned to pointer" "(Warning, ANSI-violation)"

You may not assign constants other than a null pointer to any pointer.

1.116 Warning 114

"typedef <%s> is initialized" "(Warning, ANSI-violation)"

1.117 Error 115

"lvalue required to take address" "(Error, ANSI-violation)"

You can only get the address of an object, but not of expressions etc.

1.118 Error 116

"unknown var <%s>" "(Error, ANSI-violation)"

1.119 Error 117

"address of register variables not available" "(Error, ANSI-violation)"

If a variable is declared as 'register' its address may not be taken (no matter if the variable actually gets assigned to a register).

1.120 Warning 118

"var <%s> initialized after 'extern'" "(Warning, ANSI-violation)"

1.121 Warning 119

"const var <%s> not initialized" "(Warning)"

A constant variable was not initialized in its definition. As there is no other legal way to assign a value to a constant variable this is probable an error.

1.122 Warning 120

"function definition after 'extern'" "(Warning, ANSI-violation)"

1.123 Warning 121

"return type of main is not int" "(Warning, ANSI-violation)"

main() should be defined as

```
int main(int argc, char **argv)
```

Especially the return type of main must be 'int' - 'void' is not allowed by ANSI C.

1.124 Warning 122

"invalid storage-class for function parameter" "(Warning, ANSI-violation)"

Function parameters may only have 'auto' or 'register' as storage-class. 'static' or 'extern' are not allowed.

1.125 Warning 123

"formal parameters conflict with parameter-type-list" "(Warning, ANSI-violation)"

1.126 Warning 124

"parameter type defaults to int" "(Warning)"

A function definition contains no explicit type specifier. 'int' will be assumed.

1.127 Warning 125

"no declaration-specifier, used int" "(Warning, ANSI-violation)"

A variable was declared/defined without a type specified. This is not allowed in ANSI C (apart from functions).

1.128 Warning 126

"no declarator in prototype" "(Warning, ANSI-violation)"

1.129 Warning 127

"static var <%s> never defined" "(Warning)"

1.130 Warning 128

"} expected" "(Warning)"

1.131 Warning 129

"left operand of comma operator has no side-effects" "(Warning)"

In an expression of the form a,b a has no side-effects and is therefore superfluous.

1.132 Error 130

"label empty" "(Error, ANSI-violation)"

There was a ':' without an identifier before it.

1.133 Error 131

"redefinition of label <%s>" "(Error, ANSI-violation)"

The label was defined more than once in the same function.

Consider that labels can not be hidden in inner blocks.

1.134 Error 132

"case without switch" "(Error, ANSI-violation)"

A case label was found outside of any switch-statements.

1.135 Error 133

"case-expression must be constant" "(Error, ANSI-violation)"

The expression after 'case' must be constant.

1.136 Error 134

"case-expression must be integer" "(Error, ANSI-violation)"

The expression after 'case' must be integer.

1.137 Error 135

"empty if-expression" "(Error, ANSI-violation)"

There was no valid expression after 'if'.

1.138 Error 136

"if-expression must be arithmetic or pointer" "(Error, ANSI-violation)"

The expression after 'if' must be arithmetic (i.e. an integer or floating point type) or a pointer.

1.139 Error 137

"empty switch-expression" "(Error, ANSI-violation)"

There was no valid expression after 'switch'.

1.140 Error 138

"switch-expression must be integer" "(Error, ANSI-violation)"

The expression after 'switch' must be an integer.

1.141 Error 139

"multiple default labels" "(Error, ANSI-violation)"

There was more than one default label in a switch-statement.

1.142 Error 140

"while-expression must be arithmetic or pointer" "(Error, ANSI-violation)"

The expression after the 'while' must be arithmetic (i.e. an integer or floating point type) or a pointer.

1.143 Error 141

"empty while-expression" "(Error, ANSI-violation)"

There was no valid expression after 'while'.

1.144 Error 142

"for-expression must be arithmetic or pointer" "(Error, ANSI-violation)"

The expression inside the 'for' must be arithmetic (i.e. an integer or floating point type) or a pointer.

1.145 Error 143

"do-while--expression must be arithmetic or pointer" "(Error, ANSI-violation)"

The expression after the 'while' must be arithmetic (i.e. an integer or floating point type) or a pointer.

1.146 Error 144

"goto without label" "(Error, ANSI-violation)"

'goto' must be followed by a label.

1.147 Error 145

"continue not within loop" "(Error, ANSI-violation)"

'continue' is only allowed inside of loops. Perhaps there are unbalanced '{' '}'.

1.148 Error 146

"break not in matching construct" "(Error, ANSI-violation)"

'break' is only allowed inside of loops or switch-statements. Perhaps there are unbalanced '{' '}'.

1.149 Error 147

"label <%s> was never defined" "(Error, ANSI-violation)"

There is a goto label, but label was never defined.

1.150 Warning 148

"label <%s> was never used" "(Warning)"

You defined a label, but there is no goto that jumps to it.

1.151 Warning 149

"register %s not ok" "(Warning)"

There was an internal error (i.e. a bug in the compiler)! Please report the error to volker@vb.franken.de. Thanks!

1.152 Warning 150

"default not in switch" "(Warning, ANSI-violation)"

A default label that is not in any switch-statement was found. Perhaps there are unbalanced '{ ' }'.

1.153 Warning 151

"(expected" "(Warning, ANSI-violation)"

1.154 Warning 152

"loop eliminated" "(Warning)"

There was a loop that will never be executed (e.g. while(0)...) and therefore the entire loop was eliminated.

I do not know any reason for such loops, so there is probably an error.

1.155 Warning 153

"statement has no effect" "(Warning)"

There is a statement that does not cause any side-effects (e.g. assignments, function calls etc.) and is therefore superfluous. E.g. you might have typed `a==b;` instead of `a=b;`

1.156 Warning 154

"'while' expected" "(Warning, ANSI-violation)"

The 'while' in a do-while loop is missing.

1.157 Warning 155

"function should not return a value" "(Warning)"

You specified an argument to return although the function is void. Declare the function as non-void.

1.158 Warning 156

"function should return a value" "(Warning, ANSI-violation)"

You did not specify an argument to return although the function is not void. Declare the function as void or specify a return value.

1.159 Warning 157

"{ expected" "(Warning, ANSI-violation)"

1.160 Error 158

"internal error %d in line %d of file %s !!" "(Fatal, Error)"

There was an internal error (i.e. a bug in the compiler)! Please report the error to volker@vb.franken.de. Thanks!

1.161 Error 159

"there is no message number %d" "(Fatal)"

You tried to activate or suppress a message that does not exist.

1.162 Error 160

"message number %d cannot be suppressed" "(Fatal)"

You cannot suppress a message that displays a real error, ANSI-violation or another real problem. Only 'harmless' warnings can be suppressed.

1.163 Warning 161

"implicit declaration of function <%s>" "(Warning)"

A function was called before it was declared and therefore implicitly declared as
int function();

This should be avoided in new programs.

1.164 Warning 162

"function call without prototype in scope" "(Warning)"

When writing new programs it is probably sensible to use prototypes for every function. If a function is called without a prototype in scope this may cause incorrect type conversions and is usually an error.

1.165 Warning 163

"#pragma used" "(Warning)"

Usage of #pragma should be avoided in portable programs.

1.166 Warning 164

"assignment in comparison context" "(Warning)"

The expression in an if-, for-, while- or do-while-statement is an assignment, e.g.

```
if(i=0)...
```

This could be an error, if you wanted `if(i==0)`.

If you turned on this warning and want it to shut up for a certain expression you can cast it to its type, e.g.

```
if((int)(i=0))...
```

Note that only assignments with '=' will be warned, not '+=' etc.

1.167 Warning 165

"comparison redundant because operand is unsigned" "(Warning)"

A comparison with an unsigned variable is redundant, because the result will always be constant, e.g.

```
unsigned int i;
```

```
if (i<0)...
```

This usually is a programming error and can be avoided in all cases.

1.168 Warning 166

"cast to narrow type may cause loss of precision" "(Warning)"

A variable is cast to a type smaller than its original type, so that some information may get lost. However this warning will be displayed in lots of cases where no problem can arise, e.g. `(short)(a==b)`.

1.169 Warning 167

"pointer cast may cause alignment problems" "(Warning)"

A pointer is cast to a pointer to a type with stricter alignment requirements, i.e. the new pointer might be invalid if you do not know what you are doing.

Those casts should be avoidable in all 'usual' cases.

1.170 Warning 168

"no declaration of global variable <%s> before definition" "(Warning)"

It is usually good to declare all global variables (including functions) in header files.

1.171 Warning 169

"'extern' inside function" "(Warning)"

Declaration of external variables in inner blocks is usually not a good idea.

1.172 Warning 170

"dead assignment to <%s> eliminated" "(Warning)"

A variable is assigned a value that is never used or gets overwritten before it is used. If this occurs in real code then there is either an error or an unnecessary assignment.

(This is detected only in optimizing compilation.)

1.173 Warning 171

"var <%s> is used before defined" "(Warning)"

The variable is used before it was assigned a value and therefore is undefined. It cannot be detected if the code where it is used can be reached, but if it is reached it will cause undefined behaviour. So it is most probably an error either way

(see [170](#)).

However not all uninitialized usages can be found.

Also note that the compiler may choose convenient values for uninitialized variables. Example:

```
int f(int a)
{
  int x;
  if(a) x=0;
  return(x);
}
```

Here the optimizer may choose that `x==0` if it is uninitialized and then only generate a `return(0);`

It can also happen that you get different values if you read an uninitialized variable twice although it was not assigned a value inbetween.

This is only detected in optimizing compilation.

1.174 Warning 172

"would need more than %ld optimizer passes for best results" "(Warning)"

The optimizer would probably be able to do some further optimizations if you increased the number of allowed passes with the `-optpasses=n` option.

1.175 Warning 173

"function <%s> has no return statement" "(Warning)"

A non-void function has no return statement. Either this function never returns (then better declare it as void) or it reaches end of control which would be an error.

As `main()` cannot be declared as void you will not be warned if `main` has no return statement. If you want a warning for `main`, too, you can turn on warning [174](#).

1.176 Warning 174

"function <main> has no return statement" "(Warning)"

The same like 173 for main, so you can turn it on/off separately.

1.177 Warning 175

"this code is weird" "(Warning)"

The code has a very strange control flow. There is probably a jump inside a loop or something similar and the optimizer will not make any loop optimization and perhaps worse register allocation on this construct.

There must be goto statements in the source.

This warning is only detected in optimizing compilation.

1.178 Warning 176

"size of incomplete type not available" "(Warning, ANSI-violation)"

An incomplete type must not be the argument for sizeof.

1.179 Error 177

"line too long" "(FATAL, Error, ANSI-violation, Preprocessor)"

1.180 Error 178

"identifier must begin with a letter or underscore" "(FATAL, Error, ANSI-violation, Preprocessor)"

1.181 Error 179

"cannot redefine macro" "(Error, ANSI-violation, Preprocessor)"

1.182 Error 180

"missing) after argumentlist" "(Error, ANSI-violation, Preprocessor)"

1.183 Error 181

"identifier expected" "(Error, ANSI-violation, Preprocessor)"

1.184 Warning Error

"illegal character in identifier" "(Error, ANSI-violation, Preprocessor)"

1.185 Error 183

"missing operand before/after ##" "(Error, ANSI-violation, Preprocessor)"

1.186 Error 184

"no macro-argument after #-operator" "(Error, ANSI-violation, Preprocessor)"

1.187 Error 185

"macro redefinition not allowed" "(Error, ANSI-violation, Preprocessor)"

1.188 Error 186

"unexpected end of file (unterminated comment)" "(FATAL, Error, Preprocessor)"

1.189 Error 187

"too many nested includes" "(FATAL, Error, Preprocessor)"

1.190 Error 188

"#else without #if/#ifdef/#ifndef" "(FATAL, Error, ANSI-violation, Preprocessor)"

1.191 Error 189

"#else after #else" "(Error, ANSI-violation, Preprocessor)"

1.192 Error 190

"#endif without #if" "(Error, ANSI-violation, Preprocessor)"

1.193 Error 191

"cannot include file" "(FATAL, Error, Preprocessor)"

1.194 Error 192

"expected \" or < in #include-directive" "(Error, ANSI-violation, Preprocessor)"

1.195 Warning 193

"unknown #-directive" "(Warning, Preprocessor)"

1.196 Error 194

"wrong number of macro arguments" "(Error, ANSI-violation, Preprocessor)"

1.197 Error 195

"macro argument expected" "(Error, ANSI-violation, Preprocessor)"

1.198 Error 196

"out of memory" "(FATAL, Error, Preprocessor)"

1.199 Warning 197

"macro redefinition" "(Warning, Preprocessor)"

1.200 Warning 198

"/* in comment" "(Warning, Preprocessor)"

1.201 Error 199

"cannot undefine macro" "(Error, ANSI-violation, Preprocessor)"

1.202 Warning 200

"characters after #-directive ignored" "(Warning, Preprocessor)"

1.203 Warning 201

"duplicate case labels" "(Warning, ANSI-violation)"

Each case-label in a switch-statement must have a distinct constant value attached (after converting it to the type of the switch-expression).

1.204 Warning 202

"var <%s> is incomplete" "(Warning, ANSI-violation)"

An incomplete var was defined. probably you wrote something like:

```
int a[];
```

1.205 Warning 203

"long float is no longer valid" "(Warning, ANSI-violation)"

'long float' was a synonym for double in K&R C, but this is no longer allowed in ANSI C.

1.206 Warning 204

"long double is not really supported by vbcc" "(Warning)"

vbcc does not know about long double yet and therefore will use it simply as a synonym for double. This should not break any legal code, but you will not get error messages if you e.g. assign a pointer to double to a pointer to long double.

1.207 Warning 205

"empty struct-declarations are not yet handled correct" "(Warning)"

obsolete

1.208 Warning 206

"identifier too long (only %d characters are significant)" "(Warning)"

1.209 Warning 207

"illegal initialization of var <%s>" "(Warning, ANSI-violation)"

Perhaps you tried to initialize a variable with external linkage in an inner block.

1.210 Warning 208

"suspicious loop" "(Warning)"

vbcc thinks a loop-condition looks suspicious. A possible example could be `for(i=0;i!=7;i+=2)`.

1.211 Warning 209

"ansi/iso-mode turned on" "(Warning)"

You turned on the ANSI/ISO-conforming mode. This warning is always displayed unless it is suppressed. So vbcc cannot be blamed to miss a diagnostic for any constraint violation. :-)

1.212 Warning 210

"division by zero (result set to 0)" "(Warning, ANSI-violation)"

Similar to warning @ { " 84 " LINK 84 }.

1.213 Warning 211

"constant out of range" "(Warning, ANSI-violation)"

An integral constant is too large to fit into an unsigned long.

1.214 Warning 212

"constant is unsigned due to size" "(Warning)"

If an integral constant is so large that it cannot be represented as long its type is promoted to unsigned long.

1.215 Warning 213

"varargs function called without prototype in scope" "(Warning)"

A function which takes a variable number of arguments must not be called without a prototype in scope. E.g. calling printf() without #include <stdio.h> may cause this warning.

1.216 Warning 214

"suspicious format string" "(Warning)"

The format-string of a printf-/scanflike function seems to be corrupt or not matching the type of the arguments. @ENDNODE

1.217 Warning 215

"format string contains '\0'" "(Warning)"

The format string for a printf-/scanflike function contains an embedded '\0' character.

1.218 Warning 216

"illegal use of keyword <%s>" "(Warning, ANSI-violation)"

The reserved keywords of C may not be used as identifier.
