

# Class `java.lang.Character`

```
java.lang.Object
|
+----java.lang.Character
```

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public final class **Character**  
extends [Object](#)

The Character class provides an object wrapper for Character data values and serves as a place for character-oriented operations. A wrapper is useful because most of Java's utility classes require the use of objects. Since characters are not objects in Java, they need to be "wrapped" in a Character instance.

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## Variable Index

o [\*\*MAX\\_RADIX\*\*](#)

The maximum radix available for conversion to and from Strings.

o [\*\*MIN\\_RADIX\*\*](#)

The minimum radix available for conversion to and from Strings.

## Constructor Index

o [\*\*Character\*\*](#)(char)

Constructs a Character object with the specified value.

## Method Index

o [\*\*charValue\*\*](#)()

Returns the value of this Character object.

o [\*\*digit\*\*](#)(char, int)

Returns the numeric value of the character digit using the specified radix.

- o **forDigit**(int, int)  
Returns the character value for the specified digit in the specified radix.
- o **isDigit**(char)  
Determines if the specified character is a ISO–LATIN–1 digit.
- o **isLowerCase**(char)  
Determines if the specified character is ISO–LATIN–1 lower case.
- o **isSpace**(char)  
Determines if the specified character is ISO–LATIN–1 white space according to Java.
- o **isUpperCase**(char)  
Determines if the specified character is ISO–LATIN–1 upper case.
- o **toLowerCase**(char)  
Returns the lower case character value of the specified ISO–LATIN–1 character.
- o **toString**()  
Returns a String object representing this character's value.
- o **toUpperCase**(char)  
Returns the upper case character value of the specified ISO–LATIN–1 character.

## Variables

### o MIN\_RADIX

```
public final static int MIN_RADIX
```

The minimum radix available for conversion to and from Strings. The lowest minimum value that a radix can be is 2.

**See Also:**

[toString](#)

### o MAX\_RADIX

```
public final static int MAX_RADIX
```

The maximum radix available for conversion to and from Strings. The largest maximum value that a radix can have is 36.

**See Also:**

[toString](#)

## Constructors

### o Character

```
public Character(char value)
```

Constructs a Character object with the specified value.

**Parameters:**

value – value of this Character object

# Methods

## o **isLowerCase**

```
public static boolean isLowerCase(char ch)
```

Determines if the specified character is ISO-LATIN-1 lower case.

**Parameters:**

ch – the character to be tested

**Returns:**

true if the character is lower case; false otherwise.

## o **isUpperCase**

```
public static boolean isUpperCase(char ch)
```

Determines if the specified character is ISO-LATIN-1 upper case.

**Parameters:**

ch – the character to be tested

**Returns:**

true if the character is upper case; false otherwise.

## o **isDigit**

```
public static boolean isDigit(char ch)
```

Determines if the specified character is a ISO-LATIN-1 digit.

**Parameters:**

ch – the character to be tested

**Returns:**

true if this character is a digit; false otherwise.

## o **isSpace**

```
public static boolean isSpace(char ch)
```

Determines if the specified character is ISO-LATIN-1 white space according to Java.

**Parameters:**

ch – the character to be tested

**Returns:**

true if the character is white space; false otherwise.

## o **toLowerCase**

```
public static char toLowerCase(char ch)
```

Returns the lower case character value of the specified ISO-LATIN-1 character. Characters that are not upper case letters are returned unmodified.

**Parameters:**

ch – the character to be converted

**o toUpperCase**

```
public static char toUpperCase(char ch)
```

Returns the upper case character value of the specified ISO-LATIN-1 character. Characters that are not lower case letters are returned unmodified. Note that German ess-zed and latin small letter y diaeresis have no corresponding upper case letters, even though they are lower case. There is a capital y diaeresis, but not in ISO-LATIN-1...

**Parameters:**

ch – the character to be converted

**o digit**

```
public static int digit(char ch,  
                        int radix)
```

Returns the numeric value of the character digit using the specified radix. If the character is not a valid digit, it returns -1.

**Parameters:**

ch – the character to be converted

radix – the radix

**o forDigit**

```
public static char forDigit(int digit,  
                           int radix)
```

Returns the character value for the specified digit in the specified radix. If the digit is not valid in the radix, the 0 character is returned.

**Parameters:**

digit – the digit chosen by the character value

radix – the radix containing the digit

**o charValue**

```
public char charValue()
```

Returns the value of this Character object.

**o toString**

```
public String toString()
```

Returns a String object representing this character's value.

**Overrides:**

## toString in class Object

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