A demonstration of the `program` environment

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1 Example with nfirst\s\do5(s)etn and .

The `program` style defines two environments, `program` and `programbox` for typesetting programs and algorithms. Within the program environment:

1. Newlines are significant;
2. Each line is in math mode, so for example spaces in the input file are not significant;
3. The command `\\` within a line causes an extra linebreak in the output;
4. The indentation of each line is calculated automatically;
5. To cause extra indentation, use the commands `\tab` to set a new tab, and `\untab` to remove it (see the examples below);
6. Vertical bars are used to delimit long variable names with underscores (and other unusual characters).

Here is a small program: It shows how to typeset mathematics as part of a program. Since each line is typeset in maths mode, all spacing is done automatically. The set brackets expand automatically, for example in this program (which also demonstrates the `\tab` and `\untab` commands):

[Sorry. Ignored `\beginprogram ... \endprogram`]

You can use nvariable\s\do5(n)amesn in text or math mode: . Names can have nodd\s\do5(c)haracters:!@# x. y. y>x (*yes*,*Iusetheseinmyprograms*!)
Ioftenuseboldletterstorepresentprogramfragments,*formulasetc*.
soIhavesetupcommands§,*etc*.*forthemostcommonones*.
Thecommandshaveoneargument(*asubscript*,*eg*§1,§2,§23)
*orasequenceof*k*prime*"*characters*:§',§"""*etc*.
Ifyouwantbothasubscriptandoneormoreprimes,*thenyoumustusemathsmode*,
eg§2j*Considerthedifferencebetweentyping* ``\S2'' *whichgives*k§2"*and* ``§2l":
*whichgives*k§2l

[Sorry. Ignored `\beginprogrambox ... \endprogrambox`]

Note that then and else should be at the *start* of a line (as in the examples above), not at the end. This is so that you can line them up in short if statements, for example:

[Sorry. Ignored `\beginprogram ... \endprogram`]

If the test is long, then you probably want an extra linebreak:

[Sorry. Ignored `\beginprogram ... \endprogram`]