
Proj_1A1_LED_display A Variation on the first program

MORE ABOUT THE C PROGRAMMING LANGUAGE

1. The 'while(1)' loop: Code following the 'while(1)' statement and contained within the '{}' brackets is repeated endlessly.

Note: The result of replacing the '1' between the '()' brackets with a variable is that program execution only remains within the '{}' brackets while the variable is other than zero. It is normal for the variable to be adjusted every time that the loop is executed until of course it reaches zero when program execution exits the 'while-loop'.

2. The presence of a 'for-loop' within the 'while-loop'. The design of C allows programs to be readable despite a considerable degree of complexity.

3. The use of the tabs key to indent the code and make it easier to follow.

4. The idea that the '{}' brackets always occur in pairs, click on one bracket and its companion will also be highlighted. Note the symmetry of the brackets.

5. The delay introduced by the 'SW_reset' statement. As a result of the 'while(1)' statement there is no need to perform a SW_reset or put up with the delay that it introduces. However 'PORT_1' must be reset to 1 at the beginning of each 'while-loop'.

MORE ON DRIVING THE DEVELOPMENT TOOLS

Use the 'Tools/Options/Styles/Brace Match/Text Colour' dialogue to set the colours. Make sure that the colour is very clear, in which case use of the tabs key is no longer really necessary and there is no need for code to take up so much space.