1.3   **The following program converts a real temperature obtained from the input data from Fahrenheit to Celsius. The conversion formulas are**

$$\textbf{Celsius} = \frac{5}{9}\left(\text{Fahrenheit - 32}\right)$$

$$\textbf{Fahrenheit} = \frac{9}{5}\text{Celsius } + 32$$

```c
/* This program converts a  Fahrenheit temperature
    to its equivalent Celsius temperature. */

#include <stdio.h>
#define Factor1 32
#define Conversion_factor (5.0/9.0)

int main (void)
{

 float Fahrenheit;
 float Celsius;

    printf("\nPlease enter a temperature in Fahrenheit\n");
    scanf("%f", &Fahrenheit);

    Celsius = Conversion_factor * (Fahrenheit - Factor1);

    printf("\nFor a Fahrenheit temperature %f\n", Fahrenheit);
    printf("The equivalent Celsius temperature is %f\n", Celsius);

    return 0;

}
```

Sample running:

Task: *Try to modify the program to convert a Celsius temperature to a Fahrenheit temperature.*