temperature

Write a C program that repeatedly reads the user input on temperature in degrees Fahrenheit, and then converts the temperature from degrees Fahrenheit into degrees Celsius. The relevant formula is given as follows: Celsius = (5/9)*(Fahrenheit - 32). You may assume that the user input is a positive value, and the sentinel value -1 is used for the input to indicate the end of user input. No need to check errors on user input.

A sample program template is given below:

```
#include <stdio.h>
int main()
{
    /* Write your code here */
    return 0;
}
```

Sample input and output sessions are given below:

```
    (1) Test Case 1:
        Enter the temperature in degree F: 45

    Converted degree in C: 7.22
    Enter the temperature in degree F: -1
```

(2) Test Case 2:

Enter the temperature in degree F:

12

Converted degree in C: -11.11 Enter the temperature in degree F:

45

Converted degree in C: 7.22

Enter the temperature in degree F:

-1