

Lab-6

Objective:

To make you familiar with **C++ functions**.

Assignment:

In your program, you should make use of four functions, to convert temperature in Celsius to Fahrenheit. First function will greet the user. Second function will prompt the user to enter the temperature in Celsius and it will return the temperature to the main function. The third function will take the temperature in Celsius as a parameter, it will convert the temperature to Fahrenheit and return it to the main function. Pass the result to the 4th function and Use the fourth function to print the output to the console. **Also, add more comments wherever you feel necessary in your program.**

Remember, Lowest possible temperature that can ever be achieved in Celsius is -273.15.

Sample Output:

```
Hello! I am the celsius to fahrenheit converter.  
Enter the temperature in celsius to convert it into Fahrenheit  
37  
For the inputted temperature in celsius, The temperature in fahrenheit is 98.6  
Thank you for using the converter. Have a nice day!
```

Logical outline of the program:

```
#include<iostream>  
  
using namespace std;  
  
//function declarations  
  
int main()  
{  
  
    //Declare and initialize the variables  
  
    //call function1-->greet the user  
  
    //call function2-->take input from user and store the returned value in  
    a variable(celsius)  
  
    //call function3 --> pass the variable(celsius), convert the temperature  
    to fahrenheit and return it to main  
  
    //call function4 --> pass the result to function 4 and cout the result in  
    the 4th function.  
  
    //bye bye user  
  
    return 0;  
}  
  
//function definitions
```

Note:

- The formula for
Fahrenheit = (Celsius*9/5) + 32

Grading Rubric:

- Properly formatted code header with Name, User name, Section, Instructor, Date, Assignment number and purpose (15 points)
- Proper declaration of variables and constants with descriptive names (20 points)
- Three Functions (40 points)
 - Greeting function should not take any arguments and should not return anything
 - Function that takes input from user should return the input to the main function
 - Function that does the actual calculation by taking Celsius as input should return the result to main.
 - Send the result as a parameter to the 4th function and print it to the console.
- Comments, indentation and spaces between each line of code (15 points)
- While submitting, enter the temperature in Celsius as 37 (10 points)