

TCES 201
Introduction to Computer Programming
Homework 1 – Basic Programming in C
10 Points

This homework tests your understanding of the topics covered in the first and second week related to C Programming – data types, printf, and conversions.

Part-I is written or typed answers and Part-II is to write a program. When answering Part-I explain in your own words, do not use textbook definitions or google definitions.

Part-I

1. Why do we use curly braces in C?
2. What is a preprocessor directive? Why is it used?
3. How do you find the amount of storage of the different data types? Find the storage for float, unsigned long, double, char on your machine and list them.
4. Compute the power of 2 to 10 using C. Write the expression that would do this.
5. Convert the following values to the other two forms. No credit if you don't show your work.

	Decimal	HEX	Binary
1	57		
2			110001
3		AE	
4	1400		
5		FF	

Part-II

6. Write a C program to convert Fahrenheit temperature to Celsius temperature. Print both the temperatures with one digit precision as shown below. Formula is

$$c = 5 (f - 32) / 9$$

Here's a sample output:

```
Enter temperature in Fahrenheit: 61
Temperature 61.0F is equivalent to 16.1C
```

Submission Instructions: Submit the answers and code on Canvas under hw1 Submission link.

Part-I must be named <youruwid>BasicProgramming.pdf or .doc or .docx. For Example: My file would be mmuppaBasicProgramming.pdf

Part-II source code file must be named temp_convtr.c and submitted on Canvas. Your program must contain a header in the following format.

```
/*    Menaka Abraham
      CES201
      Autumn 2014
      This program prints a simple Hello World to the console.
*/
```