Lab One
ID1303: Introduction to Programming

INSTRUCTIONS FOR LAB 1:

1. (a) Read the programs "helloWorld.c" and "printf_examples.c", compile and execute them and understand how the printf statement is used to print text on screen.

   (b) Write a C program to print: two lines of English text, followed by an empty line, followed by two more lines of English text.

   Example:

   There is a tide in the affairs of men,

   Which taken at the flood, leads to fame and fortune.

   Twinkle, twinkle, little star,

   How I wonder what you are.

   (c) Read "helloUser.c" and write a program called "capitals.c" to do the following. Accept the names of two countries and their capitals and print a statement mentioning them as shown below. Your program should run as shown.

   $:./capitals

   Enter the name of country 1: India

   Enter its capital: New Delhi

   Enter the name of country 2: France

   Enter its capital: Paris

   The capitals of India and France are New Delhi and Paris, respectively.

   (d) Modify helloUser.c so that it prints the first character of the user as Z. Example:

   $: Hello, user. What's your name? Ravi

   Welcome, Zavi

2. (a) Read, compile, execute: int_variables.c and input_int_example.c

   (b) Write a C program to accept two integer variables as input from the user and print their sum and product on the same line. Use two new variables to store the sum and product.

An example of how your program should run:

Enter first number: 8

Enter second number: 20

The sum of the two numbers is 28 and the product of the two numbers is 160.

(c) Try very large numbers in your program. Do you get correct answers? Also find the ratio of the two numbers. Do you get correct answers?

(d) Use float variables and write a program which accepts the radius of a circle and prints its area and circumference.