

**Department of Computer science and Technology,  
Indian Institute of Engineering, Science and Technology, Shibpur,  
Introduction To Computing Lab**

**Assignment - 1**

1. Write a C program to add three numbers and print the result. Here the three numbers have to be taken from the user.
2. Write a C program to compute the area and circumference of a circle for a given radius,  $r$ . Here radius,  $r$  have to be taken from the user.
3. Write a C program for temperature conversion. Use the following formula for conversion.

$$\frac{c}{5} = \frac{f-32}{9}$$

- (a) Convert the equivalent temperature in Fahrenheit ( $F$ ) to Celsius ( $C$ ). Where  $F$  have to be taken from the keyboard.
  - (b) Convert the equivalent temperature in Celsius ( $C$ ) to Fahrenheit ( $F$ ). Where  $C$  have to be taken from the keyboard.
4. Write C programs to evaluate the following *expressions*:
    - (a)  $4x^2 + 2x + 10$
    - (b)  $5x^3 + 4x^2y^2 + 4y^3 + 30$

Here  $x$  and  $y$  may be an integer / float quantity have to be taken from the keyboard.

5. Write a C program that can take three integer numbers as input from the user and prints the largest among them.
6. Write a C program to check whether a number entered by the user is even or odd.
7. Write a C program to find the sum of individual digits of a positive integer. The number has to be taken as input from the keyboard. The total number of digits in the number may be four.
8. Write a C Program to find roots of a quadratic equation where the coefficients are entered by the user.
9. Write C Program to check whether a given year entered from the keyboard is a leap year or not.
10. Write a program that prints the next character from the ASCII table for the corresponding character taken from the keyboard. As for example if the character taken from the keyboard is 'B' the program will print the immediate next character 'C'. Also, print the corresponding ASCII value.
11. Write a program that takes as input a single character from the user and check whether the entered character is a vowel or consonant.
12. Write a program that takes as input a single character from the user; If the character is an English alphabet in small case, it is converted to upper case and printed out. If the character is an English alphabet in upper case, it is converted to lower case and printed out, and If the character is not an English alphabet, then it is kept unchanged and printed out.