

Birla Institute of Technology & Science, Pilani
Computer Programming (CSF111)
Lab-6

Objectives

Conditional control structure

Today, you are required to implement the following programs yourself. If you face any problem, you are encouraged to discuss the *logic* with Lab Instructors. You are encouraged not to ask the question "MY PROGRAM IS NOT GIVING DESIRED OUTPUT" or "MY PROGRAM IS SHOWING FOLLOWING ERRORS" with Lab instructors. Rather, ask the question "MY PROGRAM IS NOT GIVING THE DESIRED OUTPUT, WHAT IS THE WAY I CAN CORRECT IT".

In a nutshell, you should not only become capable enough to write programs, but also to find logical/syntactical issues with your programs.

Q1. Write a program to print the following patterns:

(a) Pattern of numbers; i.e. for input as 5, following pattern should be printed:

```
1
12
123
1234
12345
```

(b) Pattern of numbers; i.e. for input as 5, following pattern should be printed:

```
1
12
123
1234
12345
1234
123
12
1
```

(c) Diamond pattern; i.e. for input as 5, following pattern should be printed.

```
  *
 ***
*****
*****
*****
 *****
  *****
   *****
    *****
     *
```

(d) Pattern of numbers; i.e. for input as 5, following pattern should be printed:

12345

1234

123

12

1

12

123

1234

12345

Q2. Write a C program to convert binary number to octal number.

Q3. Write a program to convert binary to decimal number.

Q4. Write a program to take two numbers (n and m) as input from the user and print the multiplication tables of numbers from n to m (both inclusive).