#### Practical 6

- 1) Check two given integers, and return true if one of them is 30 or if their sum is 30.
- 2) Check two given integers whether either of them is in the range 100..200 inclusive.
- 3) Read 10 numbers from keyboard and find their sum and average.
- 4) Display the multiplication table vertically from 1 to n.

```
Expected Output:
```

Input up to the table number starting from 1 : 3 Multiplication table from 1 to 3 1x1 = 1, 2x1 = 2, 3x1 = 3, 1x2 = 3, 2x2 = 4, 2x2 = 6

$$1x2 = 2$$
,  $2x2 = 4$ ,  $3x2 = 6$ ,

. . . .

$$1x10 = 10$$
,  $2x10 = 20$ ,  $3x10 = 30$ ,

5) Display the pattern like right angle triangle patters as follows.

#### The pattern like:

\*

\* \*

\* \* \*

\*\*\*

1

22

333

4444

6) Find the sum of the series 1 +11 + 111 + 1111 + .. n terms.

- 7) Find the grade of a student according to the marks.
  - I. Use "if else" in the following order.

Condition	Expression
1	A >= 80
2	80 > B >= 60
3	60 > C >= 45
4	45 > D >= 30
5	30 > F

II. Use a "if else" in the following order.

Condition	Expression
1	30 > F
2	45 > D >= 30
3	60 > C >= 45
4	80 > B >= 60
5	A >= 80

- 8) Consider the GPA calculation problem in previous practical. Modify that program to insert n number of subjects and calculate the GPA.
- 9) You need to develop an online purchasing system. When user logged in to the system, he can view number of menu items. Options in the system you are going to develop as follows. When user click on "Men" then Category 2 should appear. When user click on "Women" Category 3 should appear. When user click on "Kids" Category 4 should appear. Use switch statement to develop the program.

### Category 1

- 1 Men
- 2 Women
- 3 Kids

## Category 2 (Men)

- 1 Shorts
- 2 T-Shirts
- 3 Trousers

## Category 3 (Women)

- 1 Blouses
- 2 Skirts
- 3 Frocks
- 4 Trousers

# Category 4(Kids)

- 1 Toys
- 2 Frocks
- 3 Shorts
- 4 T-Shirts