Lab Task Week 12

- Plagiarized tasks will be awarded zero marks.
- There will be deduction for late submission.
- Use meaningful variable names instead of a, b, c, x, y, z.
- Use proper indentation.
- Your programs should satisfy all the requirements mentioned in the
- description or discussed in lab.
- Grading will also be based on your lab performance, better to complete tasks in lab.
- Write a program in which user will enter a no of his choice and the program will display the sum of factorials till that no.

Means if the user enters 5, the program should calculate the following

```
1! + 2! + 3! +4! + 5!
```

And display the output in the following manner.

Sample Output:

```
Enter a no: 5

1! = 1

2! = 2

3! = 6

4! = 24

5! = 120
```

• Write a C program to construct the following pattern, using a nested loop.

```
How many rows? 5

*

**

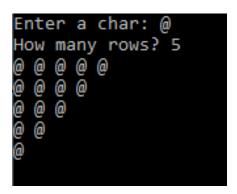
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```

• Write a C program to construct the following pattern, using a nested loop. Take the no of rows from user.

```
How many rows? 10
10 9 8 7 6 5 4 3 2 1
10 9 8 7 6 5 4 3 2
10 9 8 7 6 5 4 3
10 9 8 7 6 5 4
10 9 8 7 6 5
10 9 8 7 6
10 9 8 7
10 9 8 7
10 9 8
```

• Write a C function to construct the following pattern, using a nested for loop. User should enter a symbol e.g *,^,@,- etc, and your function should a pattern like this of that symbol



• Write a C program that takes an integer from user and print a half diamond pattern using nested loops.

Here the no from the user is the no of row after which the pattern will start to invert.