Problem 01:

Write a program in C++ to calculate the sum of the series (1*1) + (2*2) + (3*3) + (4*4) + (5*5) + ... + (n*n)

Sample Output:
Input the value for nth term: 5
1*1 = 1
2*2 = 4
3*3 = 9
4*4 = 16
5*5 = 25
The sum of the above series is: 55

Problem 02:

Write a program in C++ to find the sum of the series 1 +11 + 111 + 1111 +...n terms.

Sample Output:
Input number of terms: 5
1 + 11 + 111 + 1111 + 11111
The sum of the series is: 12345

Problem 03:

Write a program in C++ to make such a pattern like right angle triangle using number which will repeat the number for that row.

Sample Output:

```
Input number of rows: 5
1
22
333
4444
55555
```

Problem 04:

Write a program in C++ to calculate the series (1) + (1+2) + (1+2+3) + (1+2+3+4) + ... + (1+2+3+4+...+n).

Sample Output:
Input the value for nth term: 5
1 = 1
1+2 = 3
1+2+3 = 6
1+2+3+4 = 10
1+2+3+4+5 = 15
The sum of the above series is: 35

Problem 05:

Write a program in C++ to display the multiplication table vertically from 1 to n of the first 10 rows.

Sample Output:
Input the number up to: 5
Multiplication table from 1 to 5
1x1=1 2x1=2 3x1=3 4x1=4 5x1=5
1x2=2 2x2=4 3x2=6 4x2=8 5x2=10
1x3=3 2x3=6 3x3=9 4x3=12 5x3=15
1x4=4 2x4=8 3x4=12 4x4=16 5x4=20
1x5=5 2x5=10 3x5=15 4x5=20 5x5=25
1x6=6 2x6=12 3x6=18 4x6=24 5x6=30
1x7=7 2x7=14 3x7=21 4x7=28 5x7=35
1x8=8 2x8=16 3x8=24 4x8=32 5x8=40
1x9=9 2x9=18 3x9=27 4x9=36 5x9=45
1x10=10 2x10=20 3x10=30 4x10=40 5x10=50