



Q1. Write a program that uses a for loop to print the following shape of asterisks (*) to the console.

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

Q2. Modify Q1 to print a shape like this:

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

Q3. Write a C++ program that uses a for loop to print the following shape on the console.

```
&
*&
**&
***&
****&
```

Q4. Write a C++ program that uses a for loop to print the following numbers shape on the console.

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```



Q5. Write a C++ program that generates the following numbers:

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

Q6. Write a C++ program using nested loops to calculate and display the multiplication table for numbers 1 to 10 (up to 10).

```
1 x 1 = 1
1 x 2 = 2
1 x 3 = 3
1 x 4 = 4
1 x 5 = 5
1 x 6 = 6
1 x 7 = 7
1 x 8 = 8
1 x 9 = 9
1 x 10 = 10

2 x 1 = 2
2 x 2 = 4
...
```