

**1.** Create a script that displays 1-2-3-4-5-6-7-8-9-10 on one line. There will be no hyphen(-) at the starting and ending position.

**2.** Create a script using a for loop to add all the integers between 0 and 30 and display the total.

**3c.** Create a script to construct the following pattern, using nested for loop.

```
A A A A A
A A A B B
A A C C C
A D D D D
E E E E E
```

**3b.** Create a script to construct the following pattern, using nested for loop.

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

**4.** Create a script to construct the following pattern, using a nested for loop.

```
1 0 0 0 0
0 2 0 0 0
0 0 3 0 0
0 0 0 4 0
0 0 0 0 5
```

5. Write a program to calculate and print the factorial of a number using a for loop. The factorial of a number is the product of all integers up to and including that number, so the factorial of 5 is  $5*4*3*2*1= 120$ .

6. Write a program to calculate and print the Fibonacci sequence using a for loop.

**Fibonacci** is a series of numbers where a number is the sum of previous two numbers. Starting with 0 and 1, the sequence goes 0, 1, 1, 2, 3, 5, 8, 13, 21, and so on.

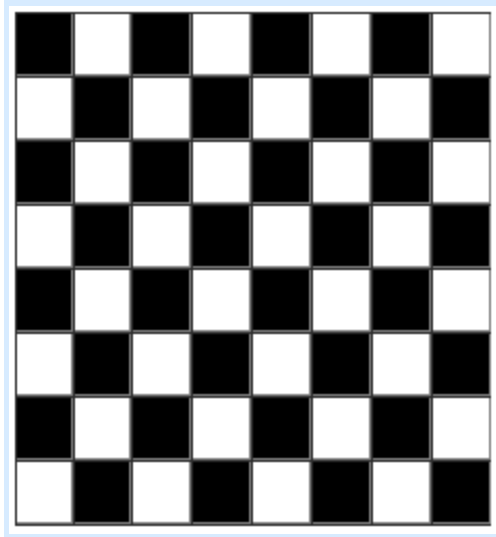
7. Write a program which will count the "c" characters in the text "OrangeAcademy".

8. Write a PHP script that creates the following table using for loops. Add cellpadding="3px" and cellspacing="0px" to the table tag.

1 * 1 = 1	1 * 2 = 2	1 * 3 = 3	1 * 4 = 4	1 * 5 = 5
2 * 1 = 2	2 * 2 = 4	2 * 3 = 6	2 * 4 = 8	2 * 5 = 10
3 * 1 = 3	3 * 2 = 6	3 * 3 = 9	3 * 4 = 12	3 * 5 = 15
4 * 1 = 4	4 * 2 = 8	4 * 3 = 12	4 * 4 = 16	4 * 5 = 20
5 * 1 = 5	5 * 2 = 10	5 * 3 = 15	5 * 4 = 20	5 * 5 = 25
6 * 1 = 6	6 * 2 = 12	6 * 3 = 18	6 * 4 = 24	6 * 5 = 30

9. Write a PHP script using nested for loop that creates a chess board as shown below.

Use table width="270px" and take 30px as cell height and width.



**10.** Write a PHP script that creates the following table (use for loops).

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

**11.** Write a PHP program which iterates the integers from 1 to 50. For multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".

**12.** Write a PHP program to generate and display the first n lines of a Floyd triangle. (use n=5 and n=11 rows).

According to Wikipedia Floyd's triangle is a right-angled triangular array of natural numbers, used in computer science education. It is named after Robert Floyd. It is defined by filling the rows of the triangle with consecutive numbers, starting with a 1 in the top left corner:

*Sample output* for n = 5 :

1

2 3

4 5 6

7 8 9 10

11 12 13 14 15

**13.** Write a PHP program to print alphabet pattern 'A'.

*Expected Output:*

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

**14.** Write a PHP program to print alphabet pattern 'B'.

*Expected Output:*

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

**15.** Write a PHP program to print alphabet pattern 'C'.

*Expected Output:*

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

**16.** Write a PHP program to print alphabet pattern.

*Expected Output:*

A  
A B  
A B C  
A B C D  
A B C D E  
A B C D  
A B C  
A B  
A