



## Exercises

1. Print First 10 natural numbers (i.e from 0 to 10) using while loop.
2. Print the following pattern using any of the loop.

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

3. Accept number from user and calculate the sum of all number between 1 and the given number;  
For example, if a user inputs 10, the output should be 55.
4. Accept input from user and print multiplication table of given number up to 12 times.
5. Accept a number from user and return the count of the total number of digits in the number.

For example, if a user inputs 75869, the output should be 5.



6. Given a list iterate it and display numbers which are divisible by 5 and if you find number greater than 150, stop the loop iteration.

For example:

```
list1 = [12, 15, 32, 42, 55, 75, 122, 132, 150, 180, 200]
```

Expected Output:

15

55

75

150

7. Reverse the following list using for loop.

```
list1 = [10, 20, 30, 40, 50]
```

8. Write a loop to find the factorial of any number

Note: The factorial (symbol: !) means to multiply all whole numbers from our chosen number down to 1.

For example,  $5! = 5 * 4 * 3 * 2 * 1 = 120$



9. Print the following pattern:

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

10. Write a function ***calculation()*** such that it can accept two variables and calculate the addition and subtraction of it. And also it must return both addition and subtraction in a single return call
11. Create a function ***showEmployee()*** in such a way that it should accept employee name, and it's salary and display both, and if the salary is missing in function call it should show it as 9000
12. Create a function ***calculateArea()*** that accepts radius and diameter as parameters and returns the area of a circle for it.