## Exercises 03

Control Flow & Iteration 900

## Exercise 01

• Write a program in Python to display the **Factorial of a number**.

#### Hints:

- Use **input Method** to get the number!
- output: Factorial of {input number} is {result}!
- output format must be same as the above format, exactly.

Example: input: 9 , output: Factorial of 9 is 362880

## Exercise 02

• Generate random integer number and Write a program to guess the number.

#### Hints:

- Use **randint()** to generate the random number between 1 to 100.
- Use **input Method** to get the number!
- if guessed number is higher than generated number, print "Wrong, Guess the lower number!"
- if guessed number is lower than generated number, print "Wrong, Guess the higher number!"
- if guessed number is equal to the generated number, print "Correct, good job"

Example: Generated Number: 8 , Guessed Number: 26, output: Wrong, Guess the lower number!

## Exercise 03

• Print the following pattern using loops.

```
0 x 0 = 0
1 x 1 = 1
2 x 2 = 4
3 x 3 = 9
4 x 4 = 16
5 x 5 = 25
6 x 6 = 36
7 x 7 = 49
8 x 8 = 64
9 x 9 = 81
10 x 10 = 100
```

## **Exercise 04**

• Use for loop to iterate from 0 to n (input number) and print the sum of all numbers.

Example: Input Number: 100, output: The sum of all numbers is 5050.

# Exercise 05 (Search)

• This is a fruit list, ['banana', 'orange', 'mango', 'lemon'] reverse the order using loop.

```
output: [ 'lemon', 'mango', 'orange', 'banana' ]
```

# Exercise 06 (Search)

• Find the max element of the [8, 120, 83, 89, 24, 97.5, 201]

output: 201