Exercises 01

Basics, Control Flow & Iteration and Operators

2000

Basics

Exercise 01

- What is the type of the following data?

1. "Filoger"
2. "19.0"
3. 18
4. 13.0
5. True

Basics

Exercise 02

- Convert the following data to integer?

1. "Filoger"
2. "19.0"
3. 18
4. 13.0
5. True

Basics

Exercise 03 (Search!)

- Print running time of program to find type of the following data ?

1. "Filoger"
2. "19.0"
3. 18
4. 13.0
5. True

Operators

Exercise 04

- Get a number as circle diameter, and calculate the circle area!

Points:

- Use **input method** to get circle diameter!
- Use **str.format()** method to print the output!
- Output must be same as following example, exactly!

```
Example:  input: 18 , output (print): Circle area is 254.469
```

Operators

Exercise 05

- Get width, height and length ,then calculate and print the surface area and volume of a cuboid!

Points:

- Use **input method** to get the inputs!
- Use **str.format()** method to print the output!
- Output must be same as following example, exactly!

```
Example:  input1: 18, input2:4, input3:5 , output (print): Volume of cuboid is 360.00 and Surface area
          of cuboid is 364.000!
```

Operators

Exercise 06

- input(2 number) and print sum, division, subtraction, multiplication

Points:

- Use **input method** to get circle diameter!
- Use **str.format()** method to print the output!
- Output must be same as following example, exactly!

```
Example:  input_1: 8, input_2: 4 , output: sum = 12, division=2, subtraction=4, multiplication=32
```

Operators

Exercise 07

- Get two string, concatenate them and print the result!

Points:

- insert a space between two strings.
- Use **input method** to get circle diameter!
- Use **str.format()** method to print the output!
- Output must be same as following example, exactly!

```
Example:  input_1: string_1 , input_2: string_2 , output: result is "string_1 string_2"
```

Operators

Exercise 08

- Write a Python program to convert Fahrenheit to Celcius.

Points:

- Use **input method** to get Fohrenheit!
- Use **str.format()** method to print the output!
- Output must be same as following example, exactly!

```
Example: input: 86 , output: 86 degree Fahrenheit is equal to 30.0 degree Celsius.
```

Exercise 09 (Search)

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

```
output: 201
```

Control Flow & Iteration

Exercise 10

- 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
```

Control Flow & Iteration

Exercise 11

- 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 12

- 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
```

Control Flow & Iteration

Exercise 13

- 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 14 (Search)

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

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