



## **Lab 5: User-Defined Functions**

### **Objective(s)**

- To be able to define new functions in Python.
- To understand the details of function calls and parameter passing in Python

### **Tool(s)/Software**

- Pycharm  
or
- IDLE (Python 3.10 or above)  
or
- <https://www.online-python.com/>

### **Description**

- Write python programs that solve the following problems:

### **Tasks/Assignments(s)**

#### **Q1:**

Write a function in Python that converts minutes given by the user to seconds:  $S=M*60$ . Then call the function and print the result.

#### **Q2:**

Write a function in Python that takes length and width as parameters and return the perimeter of rectangle:  $P=2L+2W$ . Call the function with two values given by the user.

#### **Q3:**

Write function to display the multiplication table of a number given by the user.

Example of output:

Please give the multiplier:**5**

From where to start:**1**

Where to stop:**10**

$1*5=5$

$2*5=10$

....

$10*5=50$

#### Q4:

Write a function in Python that take two numbers as parameters. This function returns the sum, difference, multiplication, and division between these two numbers. User return statement with many values. Then call the function and print the sum, the difference, multiplication, and division.

#### Q5:

Write a function in Python that takes two numbers as parameters: Balance and rate of interest. This function returns the new balance after accumulate interest on the account. Call the function with the balance amount argument given by the user and a fixed rate equal to 5%.

**Hint: New Balance= Balance\*(1+rate)**

#### Q6:

Write a function in Python called **everyThreeNum()** and that takes two parameters **start and end**. This function returns a **list** of numbers incremented by 3 starting from the start till the end.

*Example of output:*

**Start=5**

**End=12**

**[5, 8, 11]**

**Start=90**

**End=100**

**[90, 93, 96, 99]**

#### Deliverables

- Submit the files via blackboard. If blackboard is not working, send an email.
- No submissions or late submissions are penalized (from participation marks).
- Name the document Python\_Lab5\_StudentName\_Q#
- You need to submit 6 files.