LAB ACTIVITY 4(i):
Writing Functions In Python

Learning Outcomes:

By the end of this laboratory session, you should be able to:

1. **Display the use of parameters in functions**
2. **Construct Python function for returning result using return statement**

Activity 4A

Activity Outcome: Creating and calling a simple function

Procedure:

Step 1: Open Code editor and type the code based on the following code :

```
#Python function to sum all the numbers.
num1 = 12;
num2 = 23;

def sum():
    total= num1+num2
    print ("Total numbers : ", total)

sum()
```

Step 2: Save, compile and run the program. Save the program as `Act4A.py`. Display the output in the area below.

Output:

```
Total numbers :  35
```

Activity 4B

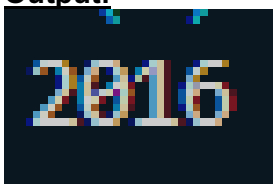
Activity Outcome: Creating and calling a simple function with a return value.

Procedure:
Step 1: Open code editor and type the following code:

```python
#Python function to multiply all the numbers in a list

num = [8, 2, 3, 6, 7]

def multiply(num):
    total = 1
    for x in num:
        total *= x
    return total

print(multiply(num))
```

Step 2: Save, compile and run the program. Save the program as `Act4B.py`. Display the output in the area below.

Output:



Activity 4C

Activity Outcome : Construct a simple function with a return value.

Procedures:

Step 1: Open code editor and type the following code:

```
#program to calculate area of rectangle
#get input from user
width = input("Please input width:")
height = input("Please input height:")
width = int(width)
height = int(height)

#function to calculate area
def calculateArea():
    area = width * height
    return area

#display output
print ("Width :", width)
print ("Height:", height)
print ("Area of rectangle:", calculateArea())
```

Step 2: Save, compile, and run the program. Save the program as `Act4C.py`. Display the output in the area below.

Output:

```
Please input width:50
Please input height:30
Width : 50
Height : 30
Area of rectangle: 1500
```

Activity 4D

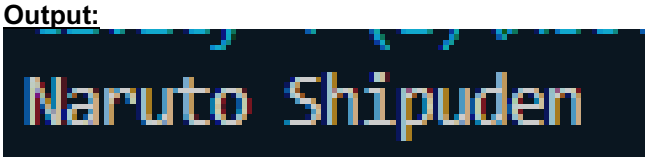
Activity Outcome : Display the use of parameters in functions

Procedures:
Step 1: Open code editor and type the following code:

```
#function that have parameters
def my_function(fname, lname):
  print(fname + " " + lname)

my_function("Naruto", "Shipuden")
```

Step 2: Save, compile and run the program. Save the program as `Act4D.py`. Display the output in the area below..

Output:



Activity 4E

Activity Outcome : Display the use of parameters in functions

Procedures:

Step 1: Open code editor and type the following code:

```
def getLastStringCharacter(s):
    l = len(s) # get string length
    return s[l-1] # get last character of the string

i = input('Insert a string: ')
print("Last character is ", getLastStringCharacter(i)) # call function
```

Step 2: Save, compile and run the program. Save the program as `Act4E.py`. Display the output in the area below..

Output: