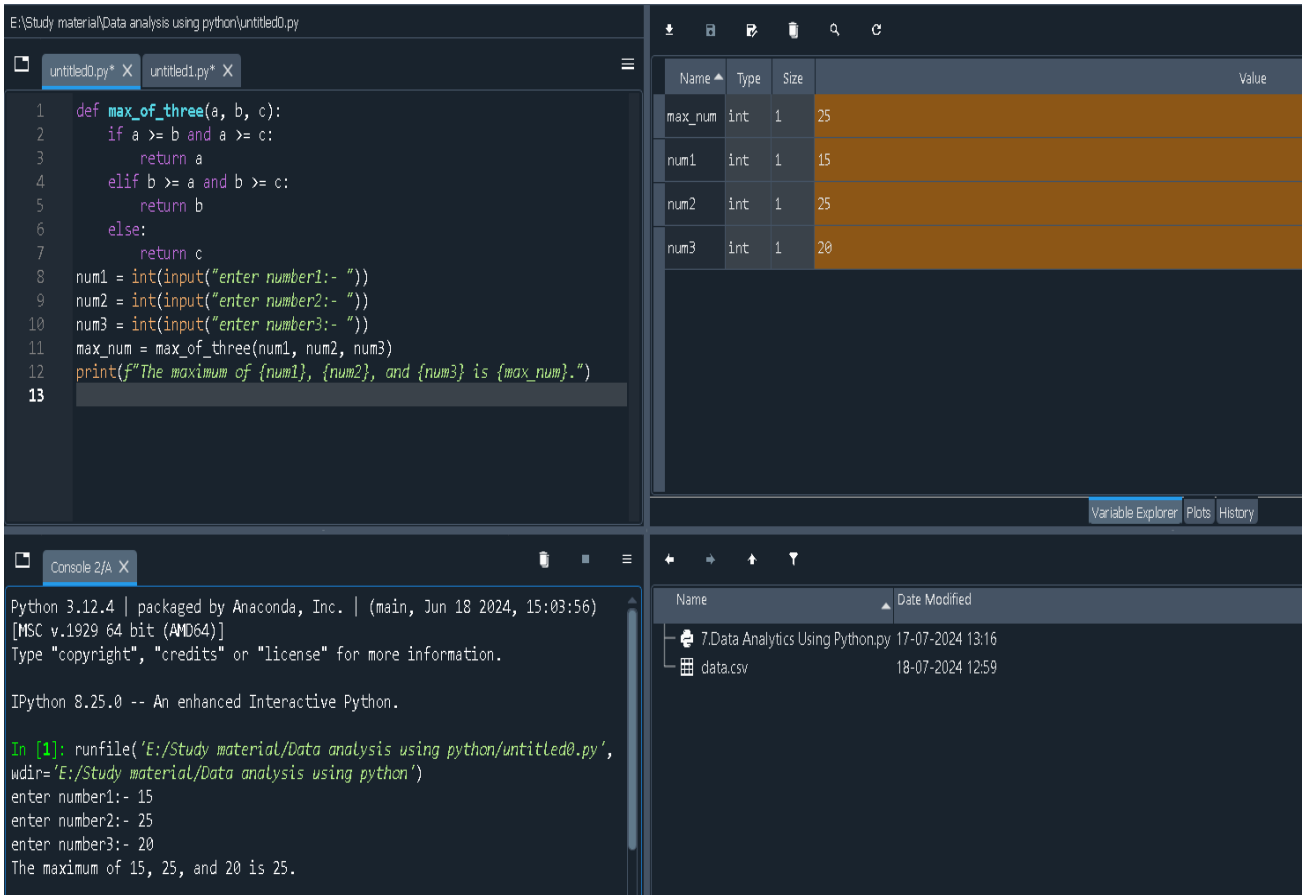


## MODULE – 4 ASSIGNMENT

### Functions

Please write Python Programs for all the problems.

1. Write a Python function to find the Max of three numbers?



The screenshot displays a Jupyter Notebook interface with three main panels:

- Code Editor:** Contains a Python function `max_of_three(a, b, c)` that uses conditional logic to return the maximum of three numbers. Below the function, it takes user input for three numbers and prints the result.
- Variable Explorer:** Shows the state of variables in memory. It lists `max_num` (25), `num1` (15), `num2` (25), and `num3` (20).
- Console:** Shows the execution output, including the prompt for numbers and the final printed message: "The maximum of 15, 25, and 20 is 25."

```
1 def max_of_three(a, b, c):
2     if a >= b and a >= c:
3         return a
4     elif b >= a and b >= c:
5         return b
6     else:
7         return c
8 num1 = int(input("enter number1:- "))
9 num2 = int(input("enter number2:- "))
10 num3 = int(input("enter number3:- "))
11 max_num = max_of_three(num1, num2, num3)
12 print(f"The maximum of {num1}, {num2}, and {num3} is {max_num}.")
13
```

Name	Type	Size	Value
max_num	int	1	25
num1	int	1	15
num2	int	1	25
num3	int	1	20

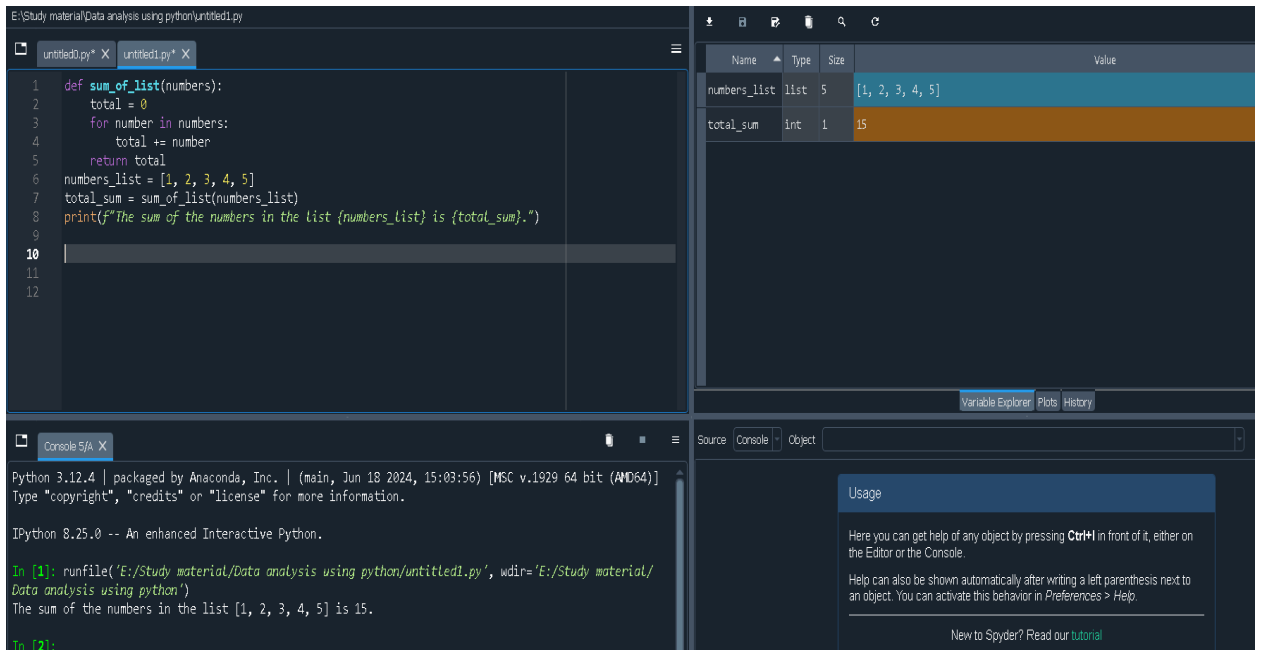
```
Python 3.12.4 | packaged by Anaconda, Inc. | (main, Jun 18 2024, 15:03:56)
[MSC v.1929 64 bit (AMD64)]
Type "copyright", "credits" or "license()" for more information.

IPython 8.25.0 -- An enhanced Interactive Python.

In [1]: runfile('E:/Study material/Data analysis using python/untitled0.py',
             wdir='E:/Study material/Data analysis using python')
enter number1:- 15
enter number2:- 25
enter number3:- 20
The maximum of 15, 25, and 20 is 25.
```

Name	Date Modified
7.Data Analytics Using Python.py	17-07-2024 13:16
data.csv	18-07-2024 12:59

## 2. Write a Python function to sum all the numbers in a list?



The screenshot shows the Spyder IDE interface. The editor window displays a Python script named `untitled1.py` with the following code:

```
1 def sum_of_list(numbers):
2     total = 0
3     for number in numbers:
4         total += number
5     return total
6 numbers_list = [1, 2, 3, 4, 5]
7 total_sum = sum_of_list(numbers_list)
8 print(f"The sum of the numbers in the list {numbers_list} is {total_sum}.")
9
10
11
12
```

The Variable Explorer on the right shows the following variables:

Name	Type	Size	Value
numbers_list	list	5	[1, 2, 3, 4, 5]
total_sum	int	1	15

The Console window at the bottom shows the output of the script:

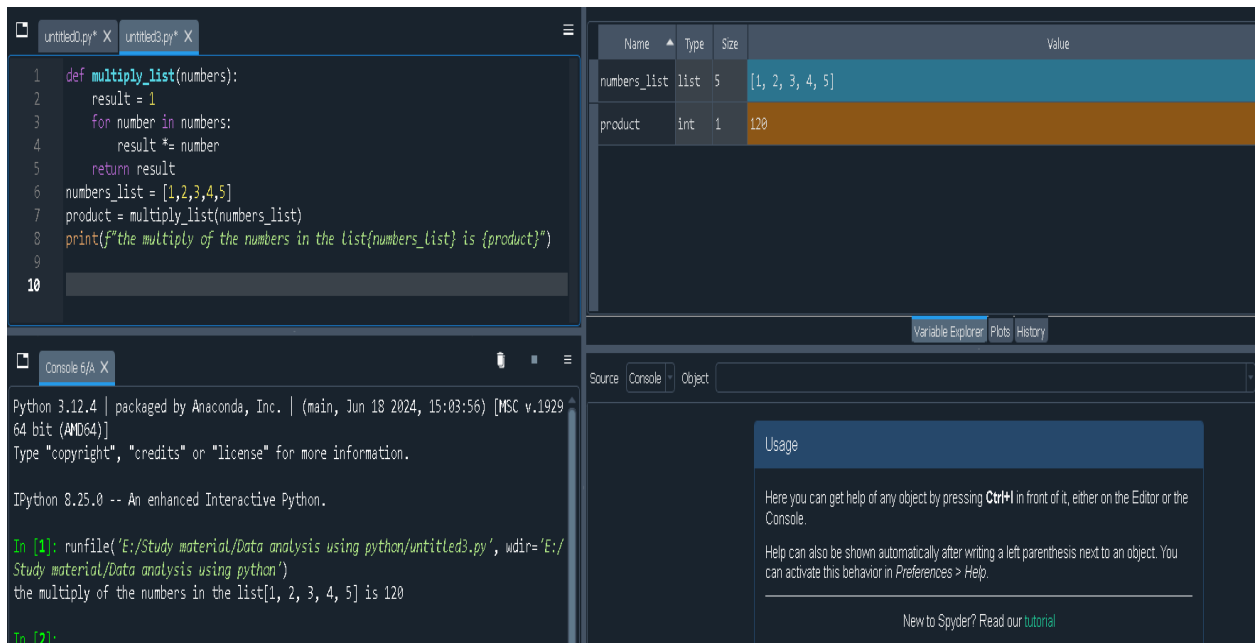
```
Python 3.12.4 | packaged by Anaconda, Inc. | (main, Jun 18 2024, 15:03:56) [MSC v.1929 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 8.25.0 -- An enhanced Interactive Python.

In [1]: runfile('E:/Study material/Data analysis using python/untitled1.py', wdir='E:/Study material/
Data analysis using python')
The sum of the numbers in the list [1, 2, 3, 4, 5] is 15.

In [2]:
```

## 3. Write a Python function to multiply all the numbers in a list.



The screenshot shows the Spyder IDE interface. The editor window displays a Python script named `untitled3.py` with the following code:

```
1 def multiply_list(numbers):
2     result = 1
3     for number in numbers:
4         result *= number
5     return result
6 numbers_list = [1,2,3,4,5]
7 product = multiply_list(numbers_list)
8 print(f"the multiply of the numbers in the list{numbers_list} is {product}")
9
10
```

The Variable Explorer on the right shows the following variables:

Name	Type	Size	Value
numbers_list	list	5	[1, 2, 3, 4, 5]
product	int	1	120

The Console window at the bottom shows the output of the script:

```
Python 3.12.4 | packaged by Anaconda, Inc. | (main, Jun 18 2024, 15:03:56) [MSC v.1929
64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 8.25.0 -- An enhanced Interactive Python.

In [1]: runfile('E:/Study material/Data analysis using python/untitled3.py', wdir='E:/
Study material/Data analysis using python')
the multiply of the numbers in the list[1, 2, 3, 4, 5] is 120

In [2]:
```

