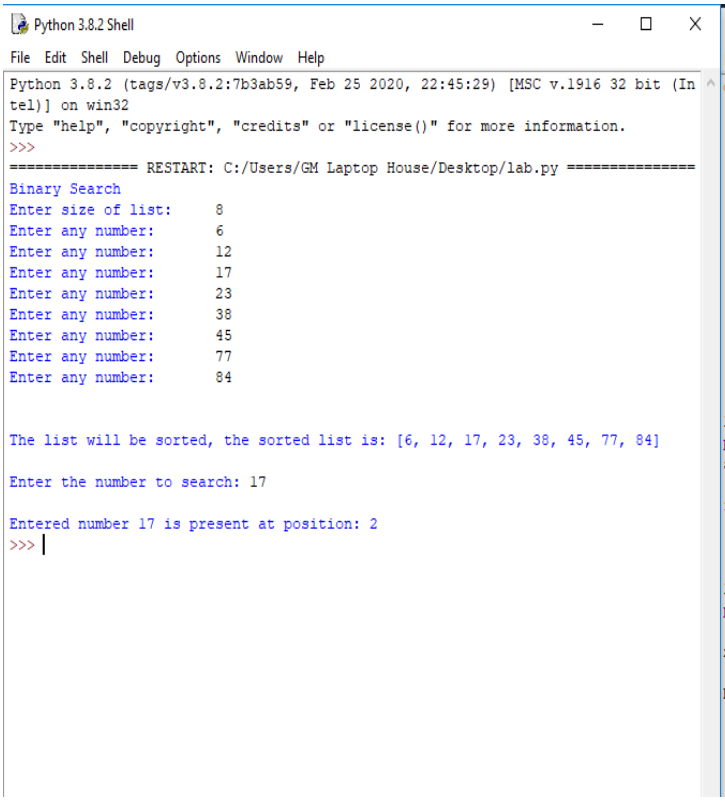
Task Lab

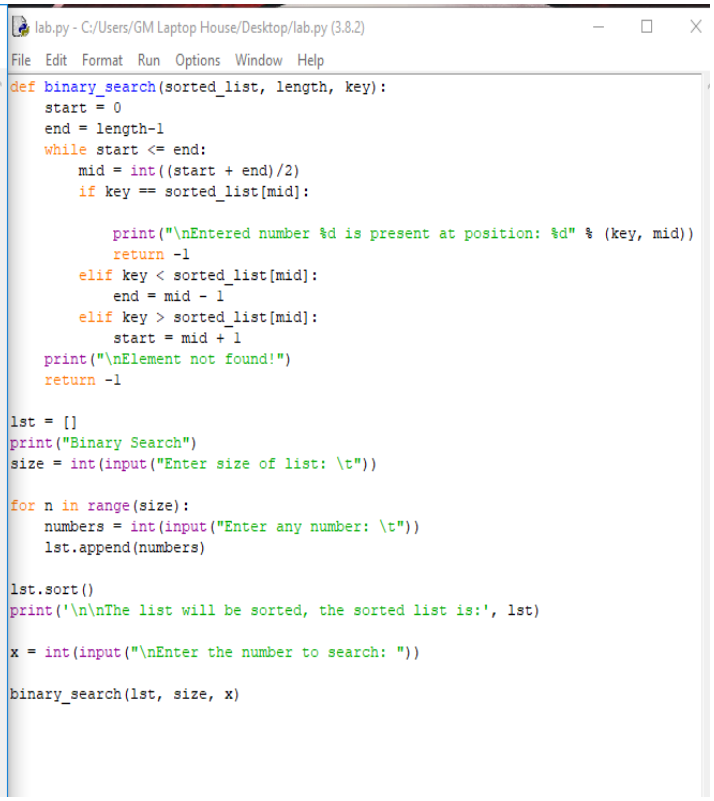
Name : Zaryab

Roll num : BSCS/S17/0109

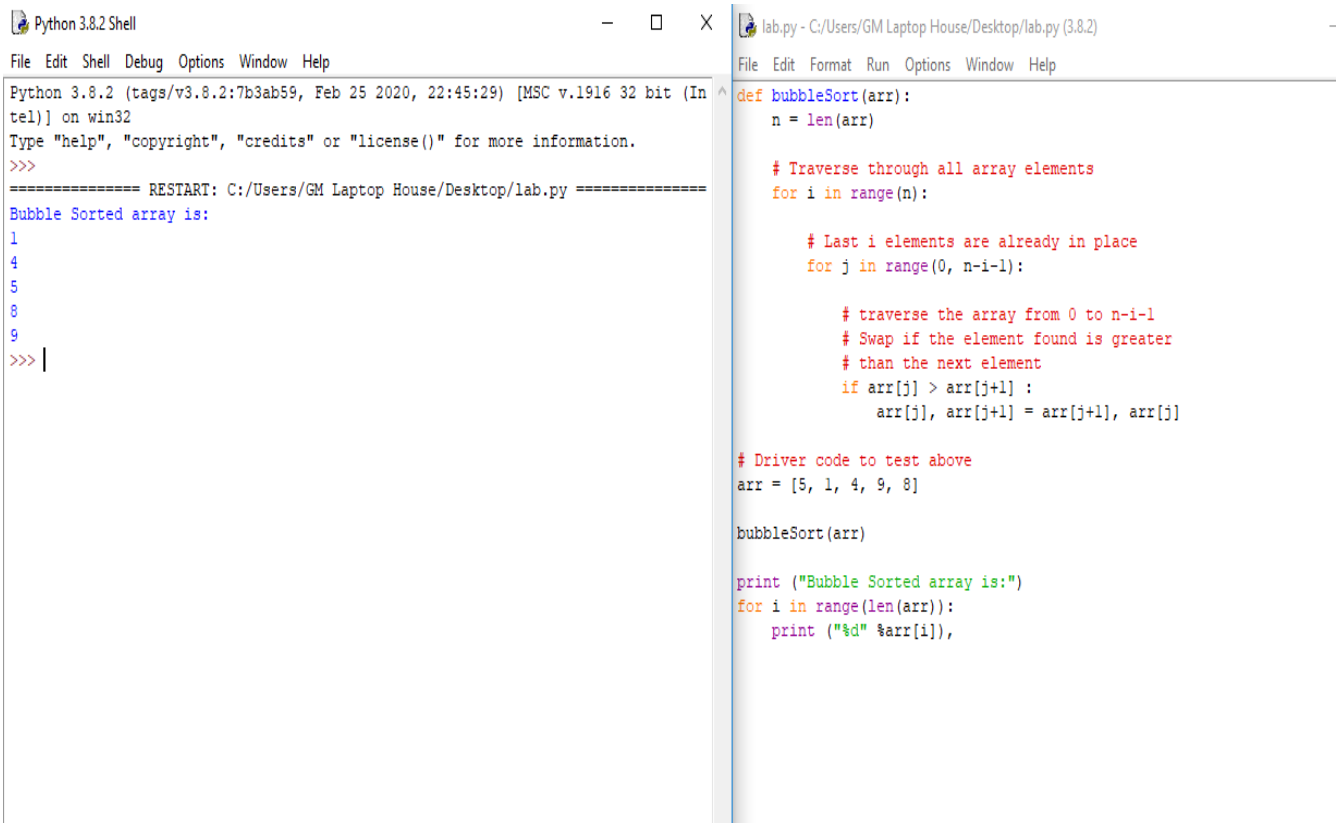
CMS ID : 293-2017

Q1. Implement Binary Search Algorithm by Python Programming, use values of figure 1.





Q2. Implement Bubble sort Algorithm by Python Programming, Take an array of 5 elements.



Python 3.8.2 Shell

File Edit Shell Debug Options Window Help

```
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (In
tel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:/Users/GM Laptop House/Desktop/lab.py ==========
Bubble Sorted array is:
1
4
5
8
9
>>>
```

lab.py - C:/Users/GM Laptop House/Desktop/lab.py (3.8.2)

File Edit Format Run Options Window Help

```
def bubbleSort(arr):
    n = len(arr)

    # Traverse through all array elements
    for i in range(n):

        # Last i elements are already in place
        for j in range(0, n-i-1):

            # traverse the array from 0 to n-i-1
            # Swap if the element found is greater
            # than the next element
            if arr[j] > arr[j+1] :
                arr[j], arr[j+1] = arr[j+1], arr[j]

# Driver code to test above
arr = [5, 1, 4, 9, 8]

bubbleSort(arr)

print ("Bubble Sorted array is:")
for i in range(len(arr)):
    print ("%d" %arr[i]),
```