Programming Laboratory-I

Performance For LAB ESE

PL 04.

NAME : Sanket Shivaji Jadhav.

PRN : 2020BTECS00005.

Q.1 . Write a C++ Program to find Prime Numbers between two numbers using function.

```
#include <bits/stdc++.h>
using namespace std;

// Function to Print all the Prime Numbers in a Given
Interval
void print(int a,int b){

    bool prime;
    // This loop is to check is the number a Prime or not.

        while ( a < b) {
        prime = true;

        if (a == 0 || a == 1) {
            prime = false;
        }

        else {
            for (int i = 2; i <= a / 2; ++i) {
                if (a % i == 0) {
                    prime = false;
                    break;
                }
            }
```

```
        }

 // If the Number is a Prime Number Then Just Print it.--
Sanket Jadhav
        if (prime)
            cout <<a<< " ";

        a++;
    }
}



// Main Driver Function.
int main() {

// Taking Input of two Numbers from user.
    int a,b;
    cout<<"Enter the Two Numbers\n";
    cin>>a>>b;

    // Function call for print function which prints all the
prime numbers in a given range.
    print(a,b);

    return 0;
}
```

Input:

```
   A = 1   B = 25
```

Output:

Q.2 Write a Python script to perform below operations on list (write saperate function)

a. create empty list

b. add any five elements to it

c. Slice the list from 2nd to 3rd position

d. extend the list by adding sublist.

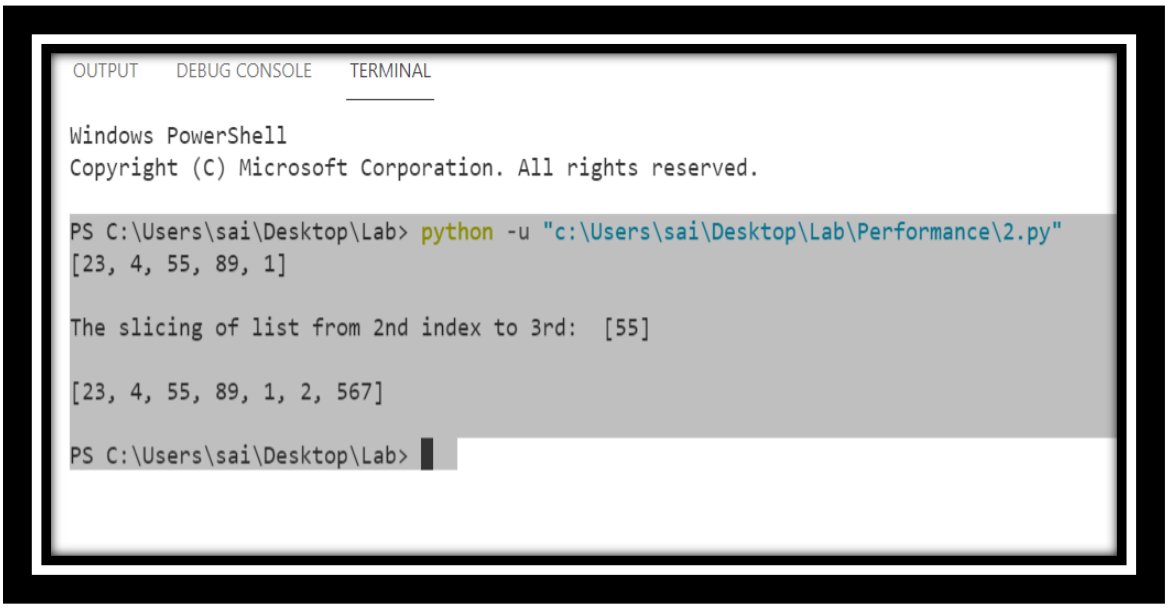
```
# Function for Creating a List
def initialize():
    lst=[]
    return lst

# Function For insertion in list
def add(lst,a,b,c,d,e):
    lst.append(a)
```

```
    lst.append(b)
    lst.append(c)
    lst.append(d)
    lst.append(e)
    print(lst)
    print()

# Function for Slicing
def slice(lst):
    print("The slicing of list from 2nd index to 3rd:
",lst[2:3])
    print()

# Function for insertion of Sublist to Main List
def sublist(lst):
    lst2=[2,567]
    lst.extend(lst2)
    print(lst)
    print()


# Main Function
if __name__ == "__main__":
    # Initialize the List (i.e Creating)
    lst=initialize()

    # Adding the Elements to the List
    add(lst,23,4,55,89,1)

    # Slicing the list from 2nd to 3rd position
    slice(lst)

    # Adding a sublist to main list
    sublist(lst)
```

Input:

```
  List.
```

Output:


OUTPUT
DEBUG CONSOLE
TERMINAL
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
PS C:\Users\sai\Desktop\Lab> python -u "c:\Users\sai\Desktop\Lab\Performance\2.py"
[23, 4, 55, 89, 1]
The slicing of list from 2nd index to 3rd: [55]
[23, 4, 55, 89, 1, 2, 567]
PS C:\Users\sai\Desktop\Lab>