

Module-3

Python Programming

Assignment Date	19 September 2022
Student Name	S.Sankari
Student Roll Number	311019104079
Maximum Marks	2 Marks

Question 1:

Consider a list (list=[]).you can perform the following commands:

Insert I e: Insert integer at position

Print: print the list

Remove e: Delete the first occurrence of integer

Append e: Insert integer at the end of the list.

Sort: Sort the list.

Pop: pop the last element from the list.

Reverse: Reverse the list.

Initialize your list and read in the value of followed by lines of commands where each command will be of the types listed above. Iterate through each command in order and perform the corresponding operation on your list.

```
list = [1, 2, 4] #Creation of list
```

```
print(list) #prints the list
```

```
list.insert(2,3) #Inserting interger(3) at position index(2)
```

```
print(list)
```

```
list.remove(1) #Deleting the first element
```

```
print(list)
```

```
list.append(5) #Inserting integer at the end of the list
```

```
print(list)
```

```
list.sort() #Sorting the list
```

```
print(list)
```

```
list.pop(3) #Pop the last element of the list
```

```
print(list)
```

```
list.reverse() #Reversing the list
```

```
print(list)
```

Output:

```
[1, 2, 4]
```

```
[1, 2, 3, 4]
```

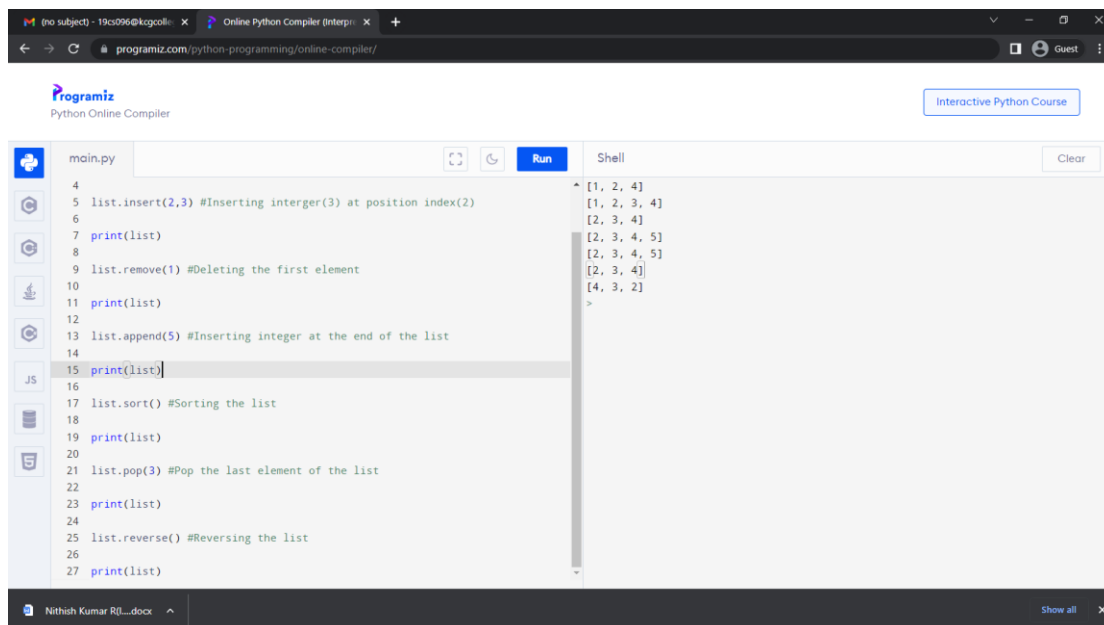
```
[2, 3, 4]
```

```
[2, 3, 4, 5]
```

```
[2, 3, 4, 5]
```

```
[2, 3, 4]
```

```
[4, 3, 2]
```



The screenshot shows the Programiz Online Python Compiler interface. The left pane displays a Python script named 'main.py' with the following code:

```
4
5 list.insert(2,3) #Inserting interger(3) at position index(2)
6
7 print(list)
8
9 list.remove(1) #Deleting the first element
10
11 print(list)
12
13 list.append(5) #Inserting integer at the end of the list
14
15 print(list)
16
17 list.sort() #Sorting the list
18
19 print(list)
20
21 list.pop(3) #Pop the last element of the list
22
23 print(list)
24
25 list.reverse() #Reversing the list
26
27 print(list)
```

The right pane, titled 'Shell', shows the output of the script:

```
[1, 2, 4]
[1, 2, 3, 4]
[2, 3, 4]
[2, 3, 4, 5]
[2, 3, 4, 5]
[2, 3, 4]
[4, 3, 2]
```

Question 2:

Write a calculator program in python?

```
def add(P, Q):
```

```
    return P + Q
```

```
def subtract(P, Q):
```

```
    return P - Q
```

```
def multiply(P, Q):
```

```
    return P * Q
```

```
def divide(P, Q):
```

```
    return P / Q
```

```
print ("Please select the operation.")
print ("a. Add")
print ("b. Subtract")
print ("c. Multiply")
print ("d. Divide")

Answer = input("Please enter choice (a/ b/ c/ d): ")

num_1 = int (input ("Please enter the first number: "))
num_2 = int (input ("Please enter the second number: "))

if Answer == 'a':
    print (num_1, " + ", num_2, " = ", add(num_1, num_2))

elif Answer == 'b':
    print (num_1, " - ", num_2, " = ", subtract(num_1, num_2))

elif Answer == 'c':
    print (num1, " * ", num2, " = ", multiply(num1, num2))
elif Answer == 'd':
    print (num_1, " / ", num_2, " = ", divide(num_1, num_2))
else:
    print ("This is an invalid input")
```

Output:

Please select the operation.

a. Add

b. Subtract

c. Multiply

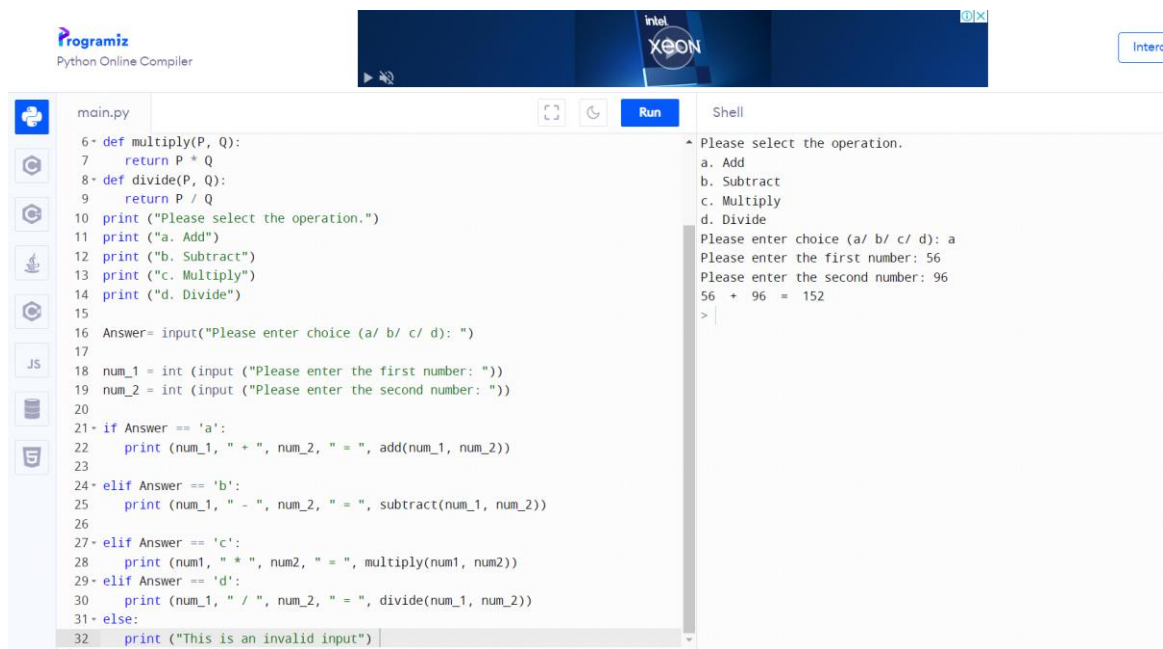
d. Divide

Please enter choice (a/ b/ c/ d): a

Please enter the first number: 7

Please enter the second number: 5

7 + 5 = 12



Question 3:

Write a program to concatenate ,reverse and slice a string?

#concatenate of two string:

```
s1="Hello"
```

```
s2="World!"
```

```
s3=s1+""+s2
```

```
print (s3)
```

```
print("*****")
```

#Slice the string

```
print(s3[2:5])
```

```
print("*****")
```

#Reverse the two string

```
def my_function(a):
```

```
    return a[::-1]
```

```
x = my_function("hello my world")
```

```
print(x)
```

Output:

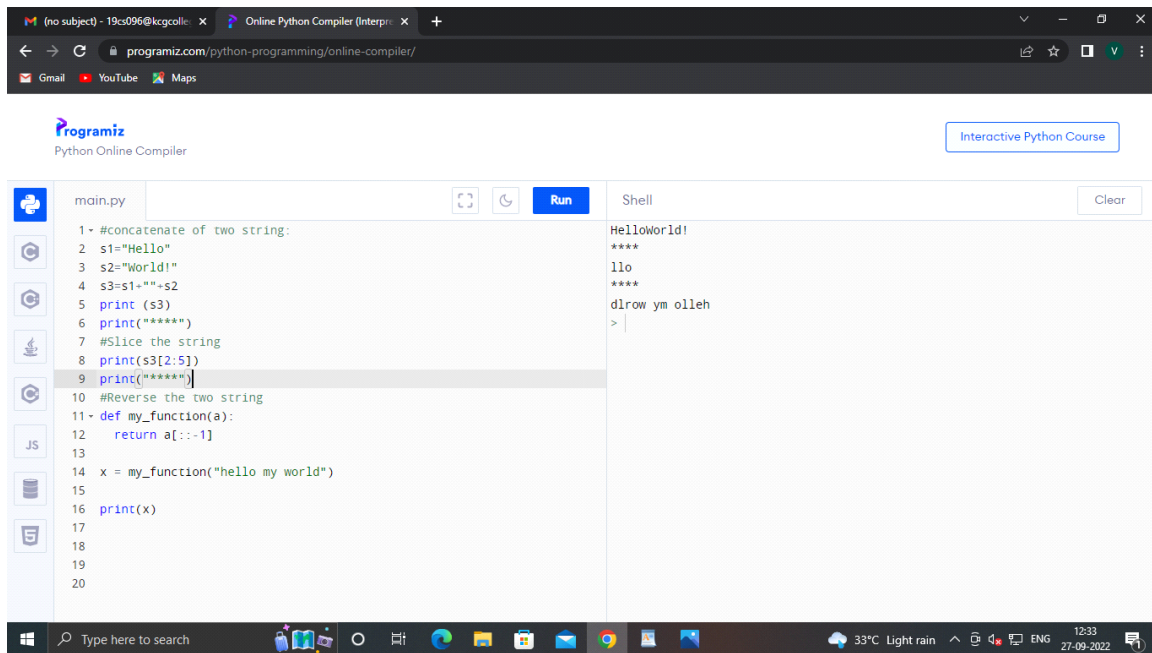
```
HelloWorld!
```

```
*****
```

```
llo
```

```
*****
```

```
dlrow ym olleh
```



Question 4:

Why is python a popular programming language?

- Easy to Learn and Use
- Mature and Supportive Python Community
- Support from Renowned Corporate Sponsors
- Hundreds of Python Libraries and Frameworks

Question 5:

What are the other frameworks that can be used with python?

1. Bottle
 2. Flask
 3. Django
 4. Web2py
 5. CherryPy
 6. AIOHTTP
- Etc.

Question 6:

Full form of WSGI?

- WSGI stands for Web Server Gateway Interface

