Assignment -1

Python Programming

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Maximum Marks	2 Marks

Question-1:

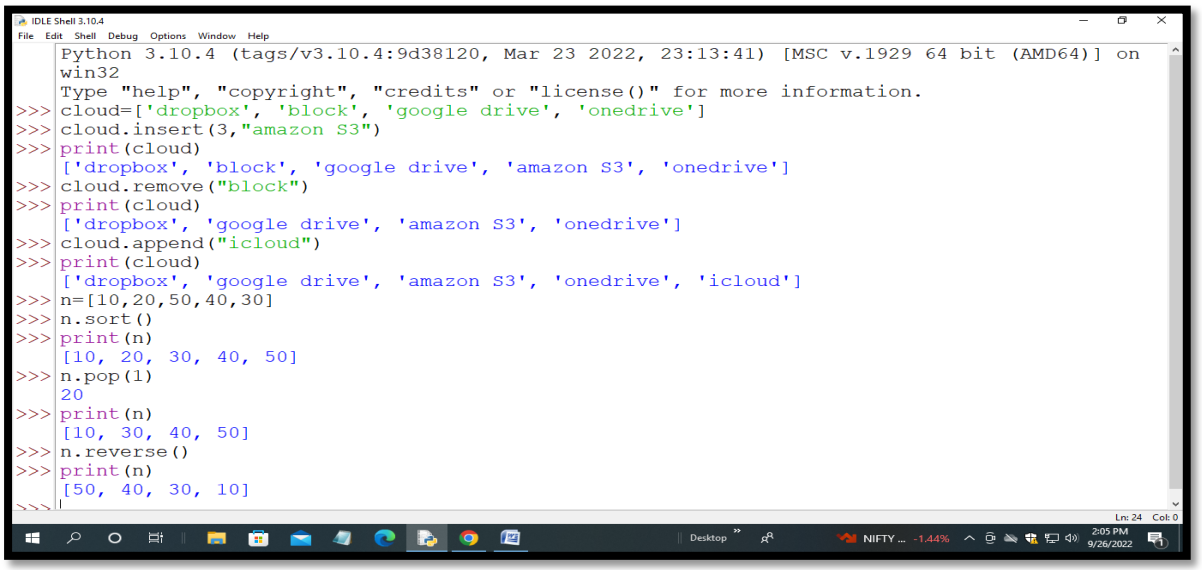
Consider a list(list=[]). You can perform the following commands:

1) Insert i e: insert integer at position.
2) Print: print the list.
3) Remove e: delete the first occurrence of integer.
4) Append e: insert integer at the end of the list.
5) Sort: sort the list.
6) Pop: pop the last element from the list.
7) 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.

Solution:

1) cloud=[‘dropbox’, ’block’, ’google drive’, ‘onedrive’]
   cloud.insert (3, ” amazon S3”)
2) Print(cloud)
3) cloud.remove(“block”)
4) cloud.append(“icloud”)
5) n=[10,20,50,40,30]
   n.sort()
6) n.pop(1)
7) n.reverse()

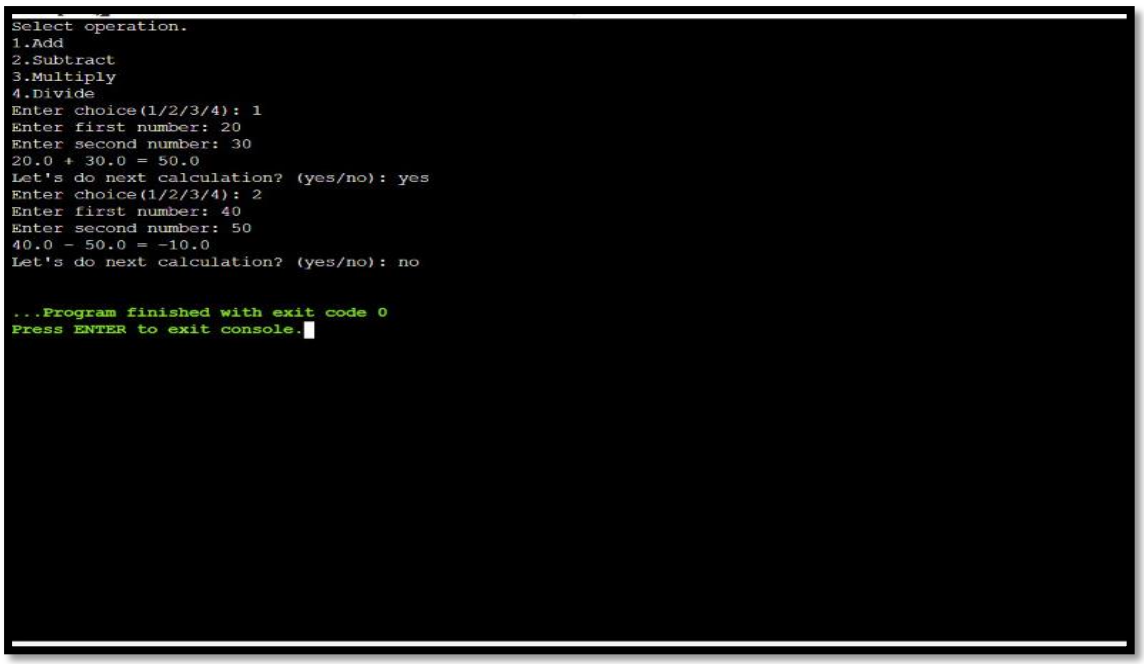


Question-2:

Write a calculator program in python?

Solution:

```
def add(x, y):
   return x + y
def subtract(x, y):
   return x – y
def multiply(x, y):
   return x * y
def divide(x, y):
   return x / y
print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
while True:
   choice = input("Enter choice(1/2/3/4): ")
   if choice in ('1', '2', '3', '4'):
      num1 = float(input("Enter first number: "))
      num2 = float(input("Enter second number: "))
      if choice == '1':
         print(num1, "+", num2, "=", add(num1, num2))
      elif choice == '2':
         print(num1, "-", num2, "=", subtract(num1, num2))
      elif choice == '3':
         print(num1, "*", num2, "=", multiply(num1, num2))
      elif choice == '4':
         print(num1, "/", num2, "=", divide(num1, num2))
      next_calculation = input("Let's do next calculation? (yes/no): ")
      if next_calculation == "no":
        break
   else:
      print("Invalid Input")
```

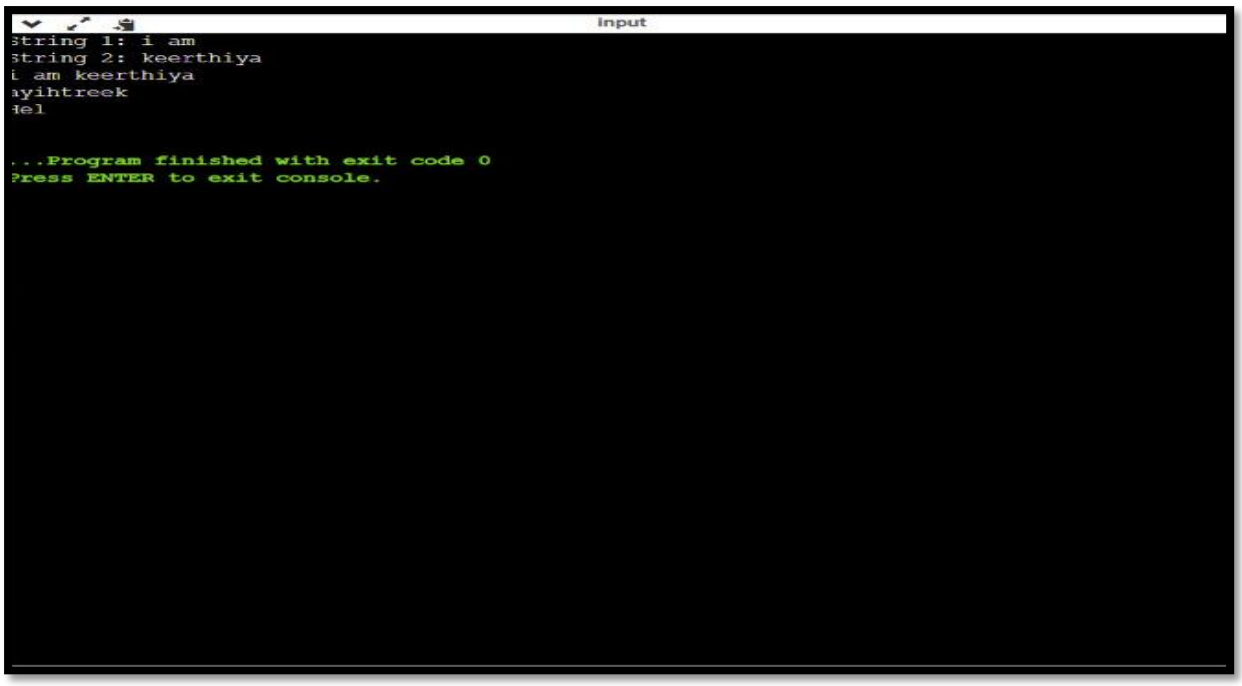


Question-3:

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

Solution:

```
str1="Hello"

str2="World"

print ("String 1:",str1)

print ("String 2:",str2)

str=str1+str2.

print(str)

def reverse(s):
   str = ""
   for i in s:
      str = i+str
   return str
s = "Hello IBM"
print(reverse(s))
String = 'Hello IBM'
print(String[:3])
```



Question-4:

Why is python a popular programming language?

Solution:

Python is a general-purpose language that is easy to learn and use. It has very simple syntax, which will be easier for the beginners to learn. And also it supports many libraries. It has been used to great effect in web development, data analytics, machine learning, data science, data engineering, and even machine learning and artificial intelligence.

Question-5:

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

Solution:

- Django
- CherryPy
- Flask
- Web2py

Question-6:

Full form of WSGI?

Solution: Web Server Gateway Interface