ASSIGNMENT - 02

ASSIGNMENT	**PYTHON PROGRAMMING**
Team ID	**PNT2022TMID47822**

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 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 listened above. Iterate through each command in order and perform the corresponding operation on your list.

SOLUTION:

```
1) Brand=['realme','oppo','vivo']
2) Brand.insert(3,"samsung")
3) Brand.remove("oppo")
4) Brand.append('redmi')
```

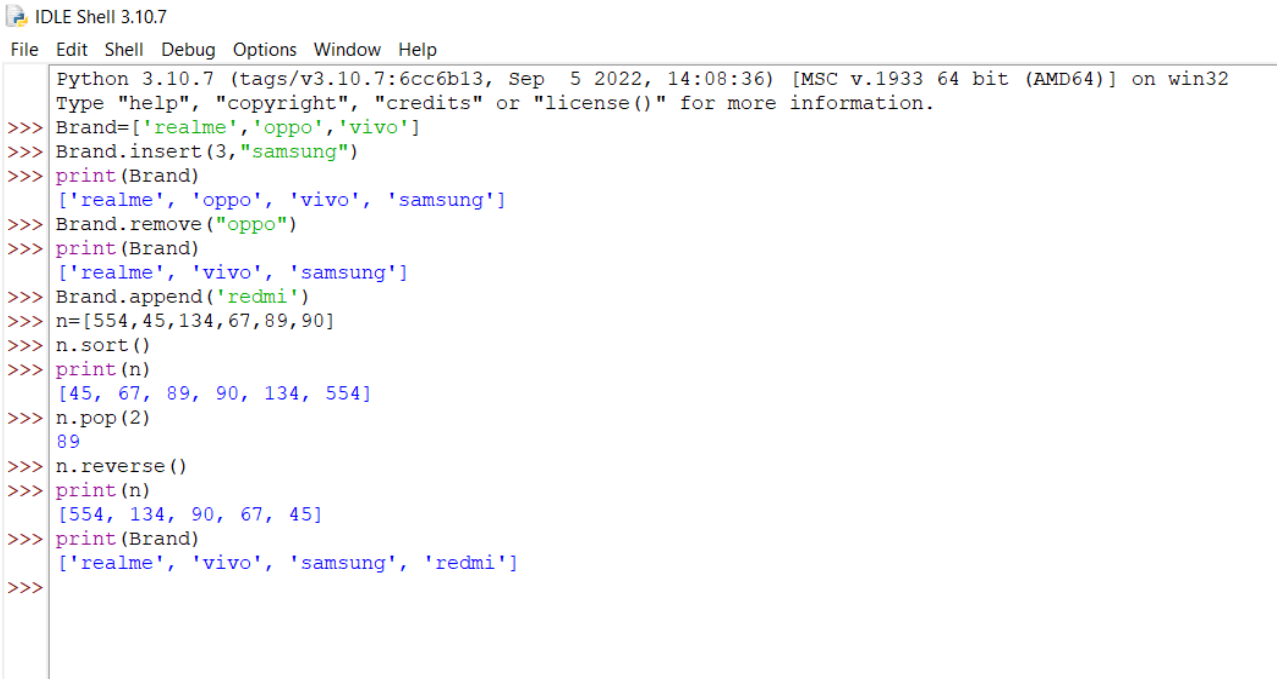
5) n=[554,45,134,67,89,90]

6) n.sort()

7) n.pop(2)

8) n.reverse()

OUTPUT:



Question-2

a)Write a calculator program in Python.

SOLUTION:

```
print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
while True:
   # take input from the user
   choice = input("Enter choice(1/2/3/4): ")
 # check if choice is one of the four options
   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))
      # check if user wants another calculation
      # break the while loop if answer is no
      next_calculation = input("Let's do next calculation? (yes/no): ")
```

```
    if next_calculation == "no":
break
    else:
    print("Invalid Input")
```

OUTPUT:

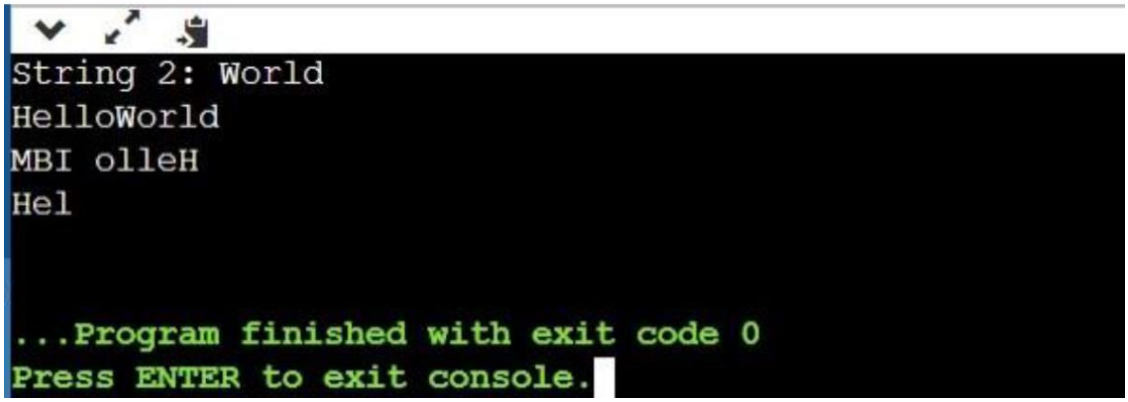
b)Write a program to concatenate,reverse and slice a string .

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])
```

OUTPUT:



c)Why is Python popular programming language?:

The python language is one of the most accessible programming language available because it has simplified syntax and not complicated which gives more emphasis on natural language. Due to its ease of learning and usage python codes can be easily written and executed much faster than other programming languages.

Python is easy to learn:

It uses a simplified syntax with an emphasis on natural language, for a much easier learning curve for beginners. And because python is free to use and is supported by an extremely large ecosystem of libraries and packages, its often the first choice language for new developers.

d)What are the other frameworks that can be used with Python?

*Django

*Flask

*Pyramid

*Web2py

*Bottle(Web Framework)

*CherryPy

*TuberGears

*Sanic

*Grok

e)Full form of WSGI:

The Web Server Gateway Interface(WSGI) is a standard interface between webserver software and web application written in python.Having a standard interface makes it easy to use a application that supports WSGI with a number of different webservers.