

ASSIGNMENT

##1.Consider a list at the position and print the list.

Program:

```
Mylist=[1,4,2,3,6,5]  
Print(Mylist)
```

Output:[1,4,2,3,6,5]

Remove first occurrence of the list

Program:

```
Mylist=[1,4,2,3,6,5]  
Mylist.remove(Mylist[0])  
Print(Mylist)
```

Output:[4,2,3,6,5]

Append integer at the end of the list

Program:

```
Mylist=[1,4,2,3,6,5]  
Mylist.append(7)  
Print(Mylist)
```

Output:[1,4,2,3,6,5,7]

Sort the list

Program:

```
Mylist=[1,4,2,3,6,5]  
Mylist.sort()  
Print(Mylist)
```

Output:[1,2,3,4,5,6]

Pop the last element of the list

program:

```
Mylist=[1,4,2,3,6,5]  
Mylist.pop(5)  
Print(Mylist)
```

Output:[1,4,2,3,6]

Reverse the List

Program:

```
Mylist=[1,4,2,3,6,5]  
Mylist.reverse()  
Print(Mylist)
```

Output:[5,6,3,2,4,1]

##2. Write a calculator program in python?

Program:

Program make a simple calculator

This function adds two numbers

```
def add(x, y):
```

```
    return x + y
```

This function subtracts two numbers

```
def subtract(x, y):
```

```
    return x - y
```

This function multiplies two numbers

```
def multiply(x, y):
```

```
    return x * y
```

This function divides two numbers

```
def divide(x, y):
```

```
    return x / y
```

```
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:Select operation.

1.Add

2.Subtract

3.Multiply

4.Divide

Enter choice(1/2/3/4): 3

Enter first number: 15

Enter second number: 14

15.0 * 14.0 = 210.0

Let's do next calculation? (yes/no): no

##3. Write a program to Concatenate ,reverse and slice a string?

String Program

```
str="Hello"  
  
print(str)
```

Output:"Hello"

Slicing a string

```
str="Hello"  
  
print(str[1:3])
```

Output:"ell"

Concatenate a string

```
str1="Hello"  
  
str2="World"  
  
str=str1+str2  
  
print(str)
```

Output:"Hello World"

Reverse a string

```
str="Hello World"[::-1]  
  
print(str)
```

Output:"dlroW olleH"

4. Why is python a popular programming language?

Python language is incredibly easy to use and learn for new beginners and newcomers.

The python language is one of the most accessible programming languages 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.

5.What are the other frame works that can be used with python?

The other frame works that can be used with python are listed below

- 1.Django.
- 2.Web2Py.
- 3.Flask.
- 4.Bottle.
- 5.CherryPy.

6.What is the full form of WSGI?

The full form of WSGI is WEB SERVER GATEWAY INTERFACE.

The Web Server Gateway Interface (WSGI, pronounced whiskey or WIZ-ghee) is a simple calling convention for web servers

to forward requests to web applications or frameworks written in the Python programming language.