

Module 3 : Python Assignment

In [8]:

```
"""
Consider a list (list = []). You can perform the following commands:
insert i e: Insert integer e at position i.
print: Print the list.
remove e: Delete the first occurrence of integer e.
append e: Insert integer e 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 n followed by n lines of commands where
"""

def print_list(list,operation):
    print(operation)
    print(list)

list = [1,3,1.5]
print_list(list,"Initial list")

list.insert(1,2)
print_list(list,"Insert 2 at index 1")

list.remove(1.5)
print_list(list,"Remove 1st occurrence of 1.5")

list.append(1.5)
print_list(list,"Append 1.5")

list.sort()
print_list(list,"Sort the list")

list.pop()
print_list(list,"Pop from list")

list.reverse()
print_list(list,"Reverse list")
```

```
Initial list
[1, 3, 1.5]
Insert 2 at index 1
[1, 2, 3, 1.5]
Remove 1st occurrence of 1.5
[1, 2, 3]
Append 1.5
[1, 2, 3, 1.5]
Sort the list
[1, 1.5, 2, 3]
Pop from list
[1, 1.5, 2]
Reverse list
[2, 1.5, 1]
```

In [9]:

```
#Write a Calculator program in Python?

def add(P, Q):
    # This function is used for adding two numbers
    return P + Q
def subtract(P, Q):
    # This function is used for subtracting two numbers
    return P - Q
def multiply(P, Q):
    # This function is used for multiplying two numbers
    return P * Q
def divide(P, Q):
    # This function is used for dividing two numbers
    return P / Q
# Now we will take inputs from the user
print ("Please select the operation.")
print ("a. Add")
print ("b. Subtract")
print ("c. Multiply")
print ("d. Divide")

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

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

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

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: 12

Please enter the second number: 13

12 + 13 = 25

In [11]:

```
#Write a prografrom audioop import reverse
```

```
firstname="MARYADA "  
lastname="LODHA"  
name=firstname+lastname  
print(name)  
print(name[::-1])  
print(name[0:7])
```

```
MARYADA LODHA  
AHDOL ADAYRAM  
MARYADA
```

Why is Python a popular programming language?

Due to its ease of learning and usage, Python codes can easily be written and executed much faster than other programming languages. One of the main reasons why Python's popularity has exponentially grown is due to its simplicity in syntax so that it could be easy to read and developed by amateur professionals as well.

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

```
Django  
Pyramid  
Flask  
CherryPy  
ETC
```

Full form of WSGI?

Web Server Gateway Interface