**Python Programming 8-9-2023**

**append method add new element to end of list**

**insert() method add element at given index with value**

**remove the element by value**

**if duplicate delete the first occurrence of the value.**

**Remove the element by value**

**Remove at specific index**

**And dulplicate**

**What if index out of bound**

**Pop method remoce the element**

**Sorting if string and number both are present**

**Pass by value in list**

sorted(my\_list);

#create a list with 1 to 10 number

my\_list = [1,2,3,0,4,5,4]

print(my\_list)

#list append - append an element to end of the list

my\_list.append(11)

print("List after append :",my\_list)

my\_list.append("karan")

print(my\_list)

#inserting list at specific location

my\_list.insert(1,0);

print("After inserting at position 1 : ",my\_list)

#altering list at given index

#my\_list[1] = 16;

#print(my\_list)

#Remove the element by value

my\_list.remove("karan")

print("After remove by value : ",my\_list)

#Remove the element based on index

#my\_list.pop(-1)

my\_list.pop(5)

print("After poping at index 5 ",my\_list)

#Find the index of an element

i = my\_list.index(4);

print("Index of element 4 is ", i);

#i = my\_list.index(100) error

#check if an element is in the list or not

p = 6 in my\_list

print("Is 6 available in list : ",p)

#count number of element in the list

c = my\_list.count(10)

print("Count of number of element = ",c)

#copying the list

my\_List\_copied = my\_list.copy();

print("original list :" , my\_list)

print("Copied list :" , my\_List\_copied)

#sort the list

my\_List\_copied.sort()

print("List after sorting ",my\_List\_copied)

my\_List\_copied.sort(reverse = True)

print("List after descending sorting ",my\_List\_copied)

#clear all element from the list

my\_List\_copied.clear()

print("List after clear :",my\_List\_copied)

order , changeable and duplicate allow

tuple

mixed data type

does not allow duplicate

tuple packing unpacking is like object contsuct and deconstructing

cars=('supra','fortuner','bmw','ferrai')

print(cars)

#accessing element of tuple by index

print(cars[0])

print(cars[-1])

print(cars[-2])

print(cars[2:])

print(cars[:3])

print(cars[2:-1])

print(cars[-1:-3:-1])

#no insert remove replace

#combine tuple together

superCars = ("GTR","Bugati")

newTuple = cars+superCars

print(newTuple)

mul = cars\*2

print(mul)

#length of a tuple

length = len(cars)

print("Length of cars :",length)

#Tuple methods

print(cars.index("ferrai"))

print(mul.count("supra"))

#Tuple packing

myCar = "supra","black",5555

#Tuple unpacking

name,color,num = myCar

#printing the unpacked values

print("Name :",name)

print("Color :",color)

print("Number :",num)

#inp = input("Enter ")

#l = [3,4,6,10,4,8,9,6,0,1,12]

#l = []

#for x in range(0,5):

# num = int(input("Enter number : "))

# l.append(num)

l = list(map(int,input("Enter space separeted values:").split(" ")))

print(l)

minimum = l[0]

maximum = l[0]

sum1 = 0

for x in l:

if(x > maximum):

maximum = x

elif(x < minimum):

minimum = x

sum1 = sum1 + x

print("Sum is :",sum1)

print("Minimum is :",minimum)

print("Maximum is :",maximum)