LIST

List is a data structure which can hold multiple values

It can be defined using **[] or list()**
`lst = [1,2,3,4]
lst2 = list((1,2,3,4))'

It can be a collection of **different data types**
list1 = [1,"hi",2.5,False]

It can be accessed by **indexing and is ordered**
print(list1[2]) ---->2.5

We **can modify** the values of the list using indexing- **mutable**
list1[3]="hello"------>[1,"hi",-2.5,"Hello"]

TUPLE

Tuple is a data structure which can hold multiple values

It can be defined using **() or list()**
`tup= [1,2,3,4]
tup2= tuple((1,2,3,4))'

It can be a collection of different data types
tup2= (1,"hi",2.5,False)

It can be **accessed by indexing** and is **ordered**
print(tup2[2]) ---->2.5

We **cannot** modify the values of the tuple using indexing- **immutable**
tup2[3]="hello"------>error

SETS

Set is a data structure which can hold multiple values

It can be defined using **{} or set()**
`set1= {1,2,3,4}
set2 = set((1,2,3,4))'

It can be a collection of different data types
set1= {1,"hi",2.5,False}

It**cannot be accessed by indexing and is unordered**
print(set2[2]) ---->error

We can modify the values of the list using iteration- **mutable**

dictionary

Dictionary is a data structure which can hold multiple values

The values are stored in a key value pair

It can be defined using () or dict()
`dict1= ("Name":"Tom","age":23)
lst2 = list((1,2,3,4))'

It can be a collection of different data types
list1 = [1,"hi",2.5,False]

It can be accessed by indexing and is in order
print(list1[2]) ---->2.5

We can modify the values of the list using indexing- mutable
list1[3]="hello"------>[1,"hi",-2.5,"Hello"]