# print("Hello World")

# lists code with harry

# python collections:

# 1. Lists

# 2.Tuple

# 3.Set

# 4. Dictionary

# ---------------------list-------------------

# List items are ordered, changeable, and allow duplicate values.

# List items are indexed, the first item has index [0], the second item has index [1] etc.

# lst = [61,2,3,4,8,41]

# var = type(lst) #type(), gives the type of data type

# lst[2]=45

# var = lst[2] #this is list slicing similar as string slicing

# var = lst[1:4] #here the 4th index value is not taken coz the net list form its value will be (n-1) i.e 4-1 = 3

# var=len(lst)

# lst.append(100) #append function add the given value at the end of the list

# lst.insert(1,100) # in the new list here (1,100) means 1 is the index no of the new list and 100 value is to be entered

# lst.remove(61) #Removes the element from the given list

# lst.pop() #pop out the last element

# del lst[3] #del deleltes the value of the perticular index

# del lst #deletes the whole list at once

# lst.clear() #clears the list

# var = lst

# print(var)

# ------------------------------------Tuple-----------------------------

# Tuple items are ordered, unchangeable, and allow duplicate values.

# Tuple items are indexed, the first item has index [0], the second item has index [1] etc.

# a=("Sounak","00Ghost","Indrajit")

# var = a

# a = list(a) #converts the tuple into list

# var = type(a) #prints the type of datatype the variable is

# a[0] = "vikrant" #This does apply for tuple because tuple is unchangable

# var = type(a)

# print(var )

# \*\*\*SEVERAL functions from list work similar in tuples

#-------------------------------Sets----------------------------

# Set items are unordered, unchangeable, and do not allow duplicate values.

# s1={1,2,2,2,3,4,5,6,7,7,8}

# s1.add(9099) #use to add single value

# s1.update([12,12,14,44,55,6,6777,0]) #use to add several values as a list elements

# print(len(s1))

# s1.remove(1) #use ot remove the value in the set by the value entered

# s1.discard(100000) #use to remove elements ,but does not give error if the element is not found

#like lists .pop, .clear, del , intersection , union

# print(s1)

# ------------------------------------Dictionary-----------------------------

# A dictionary is a collection which is ordered\*, changeable and do not allow duplicates.

# sounak\_dict = {

# "name" : "Sounak",

# "Class": "4th",

# "Marks": 34.44,

# "Hours in School": 6

# }

# print(sounak\_dict)

# sounak\_dict["Marks"]=45

# sounak\_dict.pop("Marks")

# del,clear,len

# print(sounak\_dict)