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Domain- Data Engineering

Week 3 Task

Que 1. Difference between List, Tuple, Set, and Dictionary in Python

Ans.

	List	Tuple	Set	Dictionary
1.	List is non-homogenous data structure that stores the elements in single row and multiple rows and columns	Tuple is also a non-homogenous data structure which store single row and multiple rows and columns	Set is also non homogeneous data structure but stores in single row	Dictionary is also a non-homogeneous data structure which stores key value pairs
2.	Its represent by []	Its represent by ()	Its represent by {}	Its represent by {}
3.	List can be created be using list() function	Tuple can be created by using tuple() function	Set can be created by using set() function	Dictionary can be created by using dict() function
4.	It allow duplicate elements	Tuple allow duplicate elements	Set will not allow duplicate elements	Dictionary also not allow duplicate elements
5.	List is mutable i.e. we can make changes in list	Tuple is immutable i.e. we cannot make any changes in tuple	Set is also mutable i.e. we can make changes in set. But elements are not duplicated	Dictionary is also mutable. But keys are not duplicated
6.	e.g. [1,2,3]	e.g. (1,2,3)	e.g. {1,2,3}	e.g. {1,2,3}
7.	Empty list l=[]	Empty tuple t=()	Set a=set()	Dictionary d={}

Que 2.