① What is dictionary in python? Explain with an example.

Dictionaries are another example of a data structure. A dictionary is used to map or associate things you want to store the keys you need to get them. A dictionary in python is just like a dictionary in real world. Python dictionary are defined into two elements keys & values.

- Keys will be a single elements
- Values can be a list or list within a list, numbers, etc.

Syntax

Dict = { 'Tim' : 18, xyz, ... }

Dictionary is listed in curly brackets, inside these curly brackets, keys and values are declared. Each key is separated from its value by a colon (:)

while each element is separated by commas.

There are two important points while using dictionary keys

- More than one entry per key is not allowed
- The values in the dictionary can be of any type while the keys must be immutable like numbers, tuples or strings
- Dictionary keys are case sensitive — Same key name but with the different case are treated as different keys in python dictionaries

Eg: Dict = { 'Tim': 18, 'charlie': 12, 'Robert': 25 }