

1) 2) what is a Dictionary in a python? explain with an example.

Ans:- A dictionary is a collection of an ordered set of key: value pairs with the Requirement that keys are unique in one dictionary. unlike and strings where elements are accessed using index values (which are integers). the values in Dictionary are accessed using keys. A key in dictionary can be any immutable type like strings, numbers and tuples. (the tuple can be made as a key for Dictionary, only if that the tuple consists of string / number / sub-tuples). ~~As~~ lists are mutable - i.e can be modified using index assignments like string, or using methods like append(), extend() etc., they cannot be a key for Dictionary.

Dictionary is a mapping between set of index which are actually keys) and set of values. Each key maps to a value.

Empty Dictionary can be created in 2 ways

`d = {}`
(or)

`d = dict()`

to add items to dictionary, we can use `[]` as ->>>

```
d = {}  
>>> d["mango"] = "fruit"  
>>> d["banana"] = "fruit"  
>>> d["grapes"] = "fruit"  
>>> d["carrot"] = "vegetable"
```

```
>>> print(d)
```

```
{ 'mango' : 'fruit', 'banana' : 'fruit', 'grapes' :  
  'fruit', 'carrot' : 'vegetable' }
```
