WEEK-5

1. Write a program to demonstrate working with dictionaries in python.

Source code:

```
dict1 = {'StdNo':'532','StuName': 'Naveen', 'StuAge': 21, 'StuCity': 'Hyderabad'}
print("\n Dictionary is :",dict1)
#Accessing specific values
print("\n Student Name is :",dict1['StuName'])
print("\n Student City is :",dict1['StuCity'])
#Display all Keys
print("\n All Keys in Dictionary ")
for x in dict1:
    print(x)
#Display all values
print("\n All Values in Dictionary ")
for x in dict1:
    print(dict1[x])
#Adding items
dict1["Phno"]=85457854
#Updated dictoinary
print("\n Uadated Dictionary is :",dict1)
#Change values
dict1["StuName"]="Madhu"
#Updated dictoinary
print("\n Uadated Dictionary is :",dict1)
#Removing Items
dict1.pop("StuAge");
#Updated dictoinary
print("\n Uadated Dictionary is :",dict1)
#Length of Dictionary
print("Length of Dictionary is :",len(dict1))
#Copy a Dictionary
dict2=dict1.copy()
#New dictoinary
print("\n New Dictionary is :",dict2)
#empties the dictionary
dict1.clear()
print("\n Uadated Dictionary is :",dict1)
```

Output:

```
E:\Python>python week7.py

 Dictionary is : {'StdNo': '532', 'StuName': 'Naveen', 'StuAge': 21, 'StuCity': 'Hyderabad'}

 Student Name is : Naveen

 Student City is : Hyderabad

 All Keys in Dictionary
StdNo
StuName
StuAge
StuCity

 All Values in Dictionary
532
Naveen
21
Hyderabad

 Uadated Dictionary is : {'StdNo': '532', 'StuName': 'Naveen', 'StuAge': 21, 'StuCity': 'Hyderabad', 'Phno': 85457854}

 Uadated Dictionary is : {'StdNo': '532', 'StuName': 'Madhu', 'StuAge': 21, 'StuCity': 'Hyderabad', 'Phno': 85457854}

 Uadated Dictionary is : {'StdNo': '532', 'StuName': 'Madhu', 'StuCity': 'Hyderabad', 'Phno': 85457854}
Length of Dictionary is : 4

 New Dictionary is : {'StdNo': '532', 'StuName': 'Madhu', 'StuCity': 'Hyderabad', 'Phno': 85457854}

 Uadated Dictionary is : {}
```

Description:

- We create a dictionary by placing key-value pairs inside curly brackets {}, separated by commas.
- We can change the value of a dictionary element by referring to its key.
- We can add an item to the dictionary by assigning a value to a new key (that does not exist in the dictionary).
- We use the del statement to remove an element from the dictionary.
- If we need to remove all items from the dictionary at once, we can use the clear() method.
- copy() method returns a copy (shallow copy) of the dictionary.