**Unit 5**

**Dictionaries**

**Assignment 1**

**Date:01/07/2020**

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

A dictionary is a collection which is unordered, changeable and indexed. In Python dictionaries are written with curly brackets, and they have keys and values.

Example

Create and print a dictionary:

thisdict = {  
  "brand": "Ford",  
  "model": "Mustang",  
  "year": 1964  
 }  
print(thisdict)

1. What is dictionary in Python? Explain with an example.
2. Write a Python program to sum all the items in a list.

def sum\_list(items):

sum\_numbers = 0

for x in items:

sum\_numbers += x

return sum\_numbers

print(sum\_list([1,2,-8]))

**Output:**

-5

1. Write a Python program to create a list of empty dictionaries.

n = 5

l = [{} for \_ in range(n)]

print(l)

**Output:**

[{}, {}, {}, {}, {}]

1. Write a Python program to access dictionary keys element by index.

num = {'physics': 80, 'math': 90, 'chemistry': 86}

print(list(num)[0])

**Output:**

physics

1. Write a Python program to iterate over dictionaries using for loops

d = {'Red': 1, 'Green': 2, 'Blue': 3}

for color\_key, value in d.items():

print(color\_key, 'corresponds to ', d[color\_key])

**Output:**

Red corresponds to 1

Blue corresponds to 3

Green corresponds to 2

1. Write a Python program to sum all the items in a dictionary.

my\_dict = {'data1':100,'data2':-54,'data3':247}

print(sum(my\_dict.values()))

**Output:**

293

1. Write a Python script to concatenate following dictionaries to create a new one. Sample Dictionary :

a. dic1={1:10, 2:20}

b. dic2={3:30, 4:40}

c. dic3={5:50,6:60}

Expected Result : {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}

dic1={1:10, 2:20}

dic2={3:30, 4:40}

dic3={5:50,6:60}

dic4 = {}

for d in (dic1, dic2, dic3): dic4.update(d)

print(dic4)

Output:

{1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}