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Roll No.: 127

Assignment No.: 02(2.3)

Assignment Title: Develop programs to learn different types of structures (list, dictionary, tuples)

in python

Code:

**2.3 Dictionary:**

**2.3.1 Create and display Dictionary in python**

# Creating an empty Dictionary  
Dic={}

print("Empty Dictionary:")

print(Dic)

**output:**

Empty Dictionary:

{}

# Creating a Dictionary  
# with dict() method  
Student= dic({1:'Vaishnavi',2:'Arpita',3:'Sneha',4:'Sarika'})

print("\nDictionary with the use of dict():")

print(Student)

**output:**

**NameError** Traceback (most recent call last)

Cell **In[47], line 1**

**----> 1** Student= dic({1:'Vaishnavi',2:'Arpita',3:'Sneha',4:'Sarika'})

2 print("**\n**Dictionary with the use of dict():")

3 print(Student)

**NameError**: name 'dic' is not defined

#Creating Dictionary:

Student\_List={1:'Vaishnavi',2:'Arpita',3:'Sneha',4:'Sarika',5:'Megha',6:'Sakshi',7:'Rani'}

print(Student\_List)

**Output:**

{1: 'Vaishnavi', 2: 'Arpita', 3: 'Sneha', 4: 'Sarika', 5: 'Megha, 6: 'Sakshi', 7: 'Rani'}

**2.3.2 Adding dictionary values**

# Adding new item in Dictionary  
Student\_List={1:'Vaishnavi',2:'Arpita',3:'Sneha',4:'Sarika',5:'Megha',6:'Sakshi',7:'Rani'}

print(Student\_List)

Student\_List[8]='Kavita'

print(Student\_List)

**Output:**

{1: 'Vaishnavi', 2: 'Arpita', 3: 'Sneha', 4: 'Sarika', 5: 'Megha, 6: 'Sakshi', 7: 'Rani'}

{1: 'Vaishnavi', 2: 'Arpita', 3: 'Sneha', 4: 'Sarika', 5: 'Megha, 6: 'Sakshi', 7: 'Rani', 8: 'Kavita'}

**2.3.3 Accessing Values in Dictionary**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

x=Student\_Info['Course']

print(x)

**Output:**

MCA

**2.3.4 Print Dictionary using Loop**

for x in Student\_Info:

print(x)

**Output:**

name

Age

Course

Rollno

**2.3.5 Nested Dictionary**

Students\_Info={

'Stusden1':{

'name':'Vaishnavi',

'Age':22,'Course':

'MCA',

'Rollno':127

},

'Student2':{

'name':'Arpita',

'Age':22,

'Course':'MCA',

'Rollno':83},

'Student3':{

'name':'Sneha',

'Age':22,

'Course':'MCA',

'Rollno':114}

}

print(Students\_Info)

**Output:**

{'Stusden1': {'name': 'Vaishnavi', 'Age': 22, 'Course': 'MCA',

'Rollno': 127}, 'Student2': {'name': 'Arpita', 'Age': 22,

'Course': 'MCA', 'Rollno': 83}, 'Student3': {'name': 'Sneha',

'Age': 22, 'Course': 'MCA', 'Rollno': 114}}

**2.3.6 Updating Dictionary**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

Student\_Info.update({'grade':'A+'})

print(Student\_Info)

**Output:**

{'name': 'Vaishnavi', 'Age': 22, 'Course': 'MCA', 'Rollno': 127,

'grade': 'A+'}

**2.3.7 Delete Dictionary Elements**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

Student\_Info.pop('Age')

print(Student\_Info)

**Output:**

{'name': 'Vaishnavi', 'Course': 'MCA', 'Rollno': 127}

**2.3.7 Built-in Dictionary methods / functions**

1. **clear( ):**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

Student\_Info.clear()

print(Student\_Info)

**Output:**

{ }

1. **len( )**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

x=(len(Student\_Info))

print(x)

**Output:**

4

1. **pop( )**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

Student\_Info.pop('Age')

print(Student\_Info)

**Output:**

{'name': 'Vaishnavi', 'Course': 'MCA', 'Rollno': 127}

1. **popitem( )**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

Student\_Info.popitem()

print(Student\_Info)

**Output:**

{'name': 'Vaishnavi', 'Age': 22, 'Course': 'MCA'}

1. **keys()**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

Student\_Info.keys()

**Output:**

dict\_keys(['name', 'Age', 'Course', 'Rollno'])

1. **values()**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

Student\_Info.values()

**Output:**

dict\_values(['Vaishnavi', 22, 'MCA', 127])

1. **items()**

Student\_Info={'name':'Vaishnavi','Age':22,'Course':'MCA','Rollno':127}

Student\_Info.items()

print(Student\_Info)

**Output:**

{'name': 'Vaishnavi', 'Age': 22, 'Course': 'MCA', 'Rollno': 127}