Netaji Subhash Engineering College

Department of Computer Science & Engineering

B.Tech CSE 2nd Year 3rd Semester

2021-2022

Name of Course : IT Workshop

Course code : PCC – CS393

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Date of Experiment: 30/11/2021

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1. **Question No:** 39

- **Question:** Write a program to create a dictionary that contains (i, i*i) such that i is an integral number between 1 and n (both included)
- **Code:**

'''Write a program to create a dictionary that contains (i, i*i) such that i is an integral number between 1 and n (both included)'''

```
inp = int(input("Enter a number: "))
d = {}
for i in range(1, inp+1):
    d[i] = i*i
print(d)
```

- **Snapshot:**

```
PS D:\Python Codes> python -u "d:\Python Codes\Assignment39.py"
Enter a number: 5
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25}
PS D:\Python Codes>
```

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2. **Question No:** 40

- **Question:** Write a program to count the numbers of characters in a string and store them in a dictionary.
- **Code:**

'''Write a program to count the numbers of characters in a string and store them in a dictionary.'''

```python
str = input("Enter a string: ")
d = {}
for i in str:
    if i in d:
        d[i] += 1
    else:
        d[i] = 1
print(d)
```

- **Snapshot:**

```
PS D:\Python Codes> python -u "d:\Python Codes\Assignment40.py"
Enter a string: preetam
{'p': 1, 'r': 1, 'e': 2, 't': 1, 'a': 1, 'm': 1}
PS D:\Python Codes>
```

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3. **Question No:** 41

- **Question:** Write a program to create a dictionary by combining two lists 'name' for employee name and 'salary' for employee salary. Use the list 'name' as the key and 'salary' as the value of dictionary elements.
- **Code:**

'''Write a program to create a dictionary by combining two lists 'name' for employee name and 'salary' for employee salary. Use the list 'name' as the key and 'salary' as the value of dictionary elements.'''

nameList = input("Enter the names of employees separated by comma: ").split(",")
salaryList = input("Enter the salaries of employees separated by comma: ").split(",")
dist = {}

for i in range(len(nameList)):
    dist[nameList[i]] = salaryList[i]
print(dist)

- **Snapshot:**

```
PS D:\Python Codes> python -u "d:\Python Codes\Assignment41.py"
Enter the names of employees separated by comma: rey,susen,bikram,yash
Enter the salaries of employees separated by comma: 100,200,400,20
{'rey': '100', 'susen': '200', 'bikram': '400', 'yash': '20'}
PS D:\Python Codes>
```

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4. **Question No:** 42

- **Question:** Write a program to input player's name (string) and runs (integer) scored for n number of players where n should be input from the keyboard. Store the player's details in a dictionary called 'cricket'. After preparing the dictionary, input the player's name and print the runs scored by the player otherwise returns'-1' if the player's name is not found.

- **Code:**

'''Write a program to input player's name (string) and runs (integer) scored for n number of players where n should be input from the keyboard. Store the player's details in a dictionary called 'cricket'. After preparing the dictionary, input the player's name and print the runs scored by the player otherwise returns'-1' if the player's name is not found.'''

```python
n =  int(input("Enter the number of players: "))
cricket = {}

for i in range(n):
    name = input("Enter the name of player: ")
    runs = int(input("Enter the runs scored by the player: "))
    cricket[name] = runs

while True:
    name = input("Enter the name of player: ")
    if name in cricket:
        print("The Score of player"+ name + "is",cricket[name])
    else:
        print("-1")
    ch = input("Do you want to continue? (y/n): ")
    if ch == 'n':
```

> break

- **Snapshot:**

```
PS D:\Python Codes> python -u "d:\Python Codes\Assignment42.py"
Enter the number of players: 3
Enter the name of player: rey
Enter the runs scored by the player: 100
Enter the name of player: yash
Enter the runs scored by the player: 300
Enter the name of player: susen
Enter the runs scored by the player: 600
Enter the name of player: yash
The Score of playeryashis 300
Do you want to continue? (y/n): y
Enter the name of player: rey
The Score of playerreyis 100
Do you want to continue? (y/n): y
Enter the name of player: shraik
-1
Do you want to continue? (y/n): y
Enter the name of player: susen
The Score of playersusenis 600
Do you want to continue? (y/n): n
PS D:\Python Codes>
```

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5. **Question No:** 43

- **Question:** Write a program to sort (ascending order) a dictionary by value.
- **Code:**

   '''Write a program to sort (ascending order) a dictionary by value.'''

   dis = {'a':10, 'b':5, 'c':8, 'd':4, 'e':1}

   sort_dis = sorted(dis.items(), key=lambda x: x[1])
   print("before sorting\n",dis)
   print("After sorting\n",dict(sort_dis))

- **Snapshot:**

```
PS D:\Python Codes> python -u "d:\Python Codes\Assignment43.py"
before sorting
 {'a': 10, 'b': 5, 'c': 8, 'd': 4, 'e': 1}
After sorting
 {'e': 1, 'd': 4, 'b': 5, 'c': 8, 'a': 10}
PS D:\Python Codes>
```

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6. **Question No:** 44

- **Question:** Write a program to merge two dictionaries.
- **Code:**

'''Write a program to merge two dictionaries.'''

dict1 = {'a':10, 'b':5, 'c':8, 'd':4, 'e':1}
dict2 = {'f':20, 'b':15, 'g':18, 'h':14, 'e':11}

dict3 = {**dict1, **dict2}
print("two dictionaries are\n")
print(dict1)
print(dict2)
print("sorted dict is\n")
print(dict3)

- **Snapshot:**

```
PS D:\Python Codes> python -u "d:\Python Codes\Assignment44.py"
two dictionaries are

{'a': 10, 'b': 5, 'c': 8, 'd': 4, 'e': 1}
{'f': 20, 'b': 15, 'g': 18, 'h': 14, 'e': 11}
sorted dict is

{'a': 10, 'b': 15, 'c': 8, 'd': 4, 'e': 11, 'f': 20, 'g': 18, 'h': 14}
PS D:\Python Codes>
```

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