



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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WORKSHEET – 2.3

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Subject Name: PROGRAMMING IN PYTHON Subject Code: 21CSP-259

1. **Aim:** Program to demonstrate the use of various functions of dictionary.

- WAP to combine dictionary by adding values for common keys
- WAP to find highest 3 values of corresponding keys in a dictionary

2. **Source Code:**

#WAP to combine dictionary by adding values for common keys

```
dict1 = {"a": 15, "b": 20, "c": 30, "d": 25}      #Dictionary-1
dict2 = {"b": 25, "a": 15, "c": 1, "d": 14}      #Dictionary-2

print("This program is programmed by: Udit Gupta (21BCS9091)")
print("Initial lists are-\n", dict1, "\n", dict2)

for i in dict2:                                  #Iterating through dict2
    if i in dict1:                                #Checking if key of dict2 is there in dict1 or not
        dict2[i] = dict1[i] + dict2[i]           #Adding values of common dictionary keys

print("Required dictionary is: ", dict2)
```

Outputs

```
➤ This program is programmed by: Udit Gupta (21BCS9091)
Initial lists are-
{'a': 15, 'b': 20, 'c': 30, 'd': 25}
{'b': 25, 'a': 15, 'c': 1, 'd': 14}
Required dictionary is: {'b': 45, 'a': 30, 'c': 31, 'd': 39}
```

#WAP to find highest 3 values of corresponding keys in a dictionary

```
print("This program is done by: Udit Gupta (21BCS9091)")

# A dictionary of IPL teams with no. of seasons they have won
randomDict = {"MI": 5, "CSK": 4, "KKR": 2, "SRH": 1, "GT": 1, "RR": 1, "DC": 1}
print("Initial Dictionary is: ", randomDict)

tempList = list(randomDict.values())      # A list for storing values of dict
tempList.sort(reverse = True)             # Sorting the list in descending order
tempList = tempList[:3]                   # Slicing the list for first three elements

print("Three keys with highest values are: ")
# Using loops to find the answer
for i in tempList:
    for j in randomDict:
        if (i == randomDict[j]):
            print(str(j), " -> ", randomDict[j])
```

#Outputs

```
➤ This program is done by: Udit Gupta (21BCS9091)
Initial Dictionary is: {'MI': 5, 'CSK': 4, 'KKR': 2, 'SRH': 1, 'GT': 1, 'RR': 1, 'DC': 1}
Three keys with highest values are:
MI -> 5
CSK -> 4
KKR -> 2
```