```
#1. Python program to create a dictionary with employee details and retrieve
the values upon giving the keys.

employee_details = {"Name": "Ajey Nagar", "Id": 20124000, "Contact":
1234567890, "Yearly_Salary": 1200000}
print("Employee Name:",employee_details["Name"])
print("Employee Id:",employee_details["Id"])
print("Employee Contact Number:",employee_details["Contact"])
print("Employee's Yearly Salary:",employee_details["Yearly_Salary"])
```

Output:

Employee Name: Ajey Nagar

Employee Id: 20124000

Employee Contact Number: 1234567890

Employee's Yearly Salary: 1200000

Process finished with exit code 0

```
#2. Python program to retrieve keys, values, and key-value pairs from a
dictionary.
```

```
dictionary = {"name":"MI 6","year":2018, "lead":"Tom Cruise"}
print("")
print(dictionary)
print("")
#keys
print("The keys for the dictionary are:")
for keys in dictionary:
    print(keys)

print("")

#values
print("The values for the dictionary are:")
for values in dictionary:
    print(dictionary[values])

print("")

# keys-values
print("The keys-values for the dictionary are:")
for data in dictionary:
    print(data+": ",dictionary[data])
```

Output:

{'name': 'MI 6', 'year': 2018, 'lead': 'Tom Cruise'}

The keys for the dictionary are:

name

year

lead

The values for the dictionary are:

MI 6

2018

Tom Cruise

The keys-values for the dictionary are:

name: MI 6

year: 2018

lead: Tom Cruise

Process finished with exit code 0

```
#3. Python program to understand dictionary methods.

d = {1: "one", 2: "two"}
print(d)
d.clear()
```

```
print('clear =', d)
print("")

d = {1: "one", 2: "two"}
new = d.copy()
print('Orignal: ', d)
print('New: ', new)
print("")

keys = {'a', 'e', 'i', 'o', 'u' }
print(keys)
vowels = dict.fromkeys(keys)
print(vowels)
print("")

person = {'name': 'Ajey Nagar', 'age': 22}
print(person)
print('Name: ', person.get('name'))
print('Age: ', person.get('age'))
print('Salary: ', person.get('salary'))
print('Salary: ', person.get('salary', 0.0))
print("")

sales = { 'apple': 2, 'orange': 3, 'grapes': 4 }
print(sales)
print(sales.items())
print("")

person = {'name': 'Bhuvan Bam', 'age': 22, 'salary': 3500.0}
print(person)
print(person.keys())
empty_dict = {}
print(empty_dict.keys())
print("")

sales = { 'apple': 2, 'orange': 3, 'grapes': 4 }
print(sales)
element = sales.pop('apple')
print('The popped element is:', element)
print('The dictionary is:', sales)
print("")

person = {'name': 'Harsh Beniwal', 'age': 22, 'salary': 3500.0}
print(person)
result = person.popitem()
print('Return Value = ', result)
print('person = ', person)
person['profession'] = 'Engineer'
result = person.popitem()
print('Return Value = ', result)
print('person = ', person)
print("")

person = {'name': 'Nawazuddin', 'age': 22}
print(person)
age = person.setdefault('age')
print('person = ',person)
print('Age = ',age)
```

```
print("")

d = {1: "one", 2: "three"}
d1 = {2: "two"}
print(d)
print(d1)
d.update(d1)
print(d)
d1 = {3: "three"}
d.update(d1)
print(d)
print("")

sales = { 'apple': 2, 'orange': 3, 'grapes': 4 }
print(sales)
print(sales.values())
```

Output:

{1: 'one', 2: 'two'}

clear = {}

Orignal: {1: 'one', 2: 'two'}

New: {1: 'one', 2: 'two'}

{'e', 'u', 'a', 'i', 'o'}

{'e': None, 'u': None, 'a': None, 'i': None, 'o': None}

{'name': 'Ajey Nagar', 'age': 22}

Name: Ajey Nagar

Age: 22

Salary: None

Salary: 0.0

{'apple': 2, 'orange': 3, 'grapes': 4}

dict_items([('apple', 2), ('orange', 3), ('grapes', 4)])

{'name': 'Bhuvan Bam', 'age': 22, 'salary': 3500.0}

```
dict_keys(['name', 'age', 'salary'])
dict_keys([])

{'apple': 2, 'orange': 3, 'grapes': 4}
The popped element is: 2
The dictionary is: {'orange': 3, 'grapes': 4}

{'name': 'Harsh Beniwal', 'age': 22, 'salary': 3500.0}
Return Value =  ('salary', 3500.0)
person =  {'name': 'Harsh Beniwal', 'age': 22}
Return Value =  ('profession', 'Engineer')
person =  {'name': 'Harsh Beniwal', 'age': 22}

{'name': 'Nawazuddin', 'age': 22}
person =  {'name': 'Nawazuddin', 'age': 22}
Age =  22

{1: 'one', 2: 'three'}
{2: 'two'}
{1: 'one', 2: 'two'}
{1: 'one', 2: 'two', 3: 'three'}

{'apple': 2, 'orange': 3, 'grapes': 4}
dict_values([2, 3, 4])

Process finished with exit code 0
```

```
#4. Python program to create a dictionary (with cricket player's names and
scores in the match) from keyboard and display the elements. Also retrieves
runs by entering the player's name.

list1 = []
list2 = []
for i in range(1,12):
    print("Enter name of Player{0}:".format(i))
    list1.append(str(input()))
    print("Enter runs of Player{0}:".format(i))
    list2.append(int(input()))
```

```
dict =
{list1[0]:list2[0],list1[1]:list2[1],list1[2]:list2[2],list1[3]:list2[3],list
1[4]:list2[4],list1[5]:list2[5],list1[6]:list2[6],list1[7]:list2[7],list1[8]:
list2[8],list1[9]:list2[9],list1[10]:list2[10]}
name = str(input('Please enter the name of the player: '))
print("The score of {0} is: {1}".format(name,dict[name]))
```

Output:

Enter name of Player1:

virat

Enter runs of Player1:

50

Enter name of Player2:

dhoni

Enter runs of Player2:

70

Enter name of Player3:

chahal

Enter runs of Player3:

30

Enter name of Player4:

bumrah

Enter runs of Player4:

25

Enter name of Player5:

sachin

Enter runs of Player5:

110

Enter name of Player6:

gautam

Enter runs of Player6:

60

Enter name of Player7:

raina

Enter runs of Player7:

55

Enter name of Player8:

hardik

Enter runs of Player8:

65

Enter name of Player9:

sehwag

Enter runs of Player9:

40

Enter name of Player10:

rohit

Enter runs of Player10:

95

Enter name of Player11:

jadeja

Enter runs of Player11:

85

Please enter the name of the player: sachin

The score of sachin is: 110

Process finished with exit code 0

```python
#5. Python program to find the number of occurrences of each letter in a string using dictionary.

def count_letters(text):
  result = {}

  for letter in text:

    if letter not in result:
      result[letter.lower()] = 1

    else:
      result[letter.lower()] += 1
  return result


print(count_letters("AaBbCc"))
```

```
print(count_letters("Hello World !"))
```

Output:

{'a': 2, 'b': 2, 'c': 2}

{'h': 1, 'e': 1, 'l': 3, 'o': 2, ' ': 2, 'w': 1, 'r': 1, 'd': 1, '!': 1}

Process finished with exit code 0

```
#6. Python program to sort the elements of a dictionary based on a key or
value.

d = {
    "s": 1,
    "c": 3,
    "m": 9,
    "x": 7,
    "b": 5
}
print("Original Dictionary: ", d)
print("Sorted Dictionary: ")
print(sorted(d.items()))
```

Output:

Original Dictionary: {'s': 1, 'c': 3, 'm': 9, 'x': 7, 'b': 5}

Sorted Dictionary:

[('b', 5), ('c', 3), ('m', 9), ('s', 1), ('x', 7)]

Process finished with exit code 0

```
#7. Python program to find the sum of all items in a dictionary.

def DicSum(myDict):
  sum = 0
  for i in myDict:
    sum = sum + myDict[i]

  return sum


dict = {'a': 100, 'b': 200, 'c': 600, 'd': 500}
print("Sum :", DicSum(dict))
```

Output:

Sum : 1400

Process finished with exit code 0

```
#7. Python Program to Concatenate Two Dictionaries into One.

d1={'A':1,'B':2}
d2={'C':3}
d1.update(d2)
print("Concatenated dictionary is:")
print(d1)
```

Output:

Concatenated dictionary is:

{'A': 1, 'B': 2, 'C': 3}

Process finished with exit code 0

```
#9. Python Program to Count the Frequency of Words Appearing in a String
Using a Dictionary.

string = input("Enter string:")
List = []
List = string.split()
word_freq = [List.count(x) for x in List]
print(dict(zip(List, word_freq)))
```

Output:

Enter string:the quick brown fox jumps over the lazy dog

{'the': 2, 'quick': 1, 'brown': 1, 'fox': 1, 'jumps': 1, 'over': 1, 'lazy': 1, 'dog': 1}

Process finished with exit code 0

```
#10. Python Program to Convert Two Lists into a Dictionary.

List_1 = ["Mon", "Tue", "Wed"]
List_2 = [1, 2, 3]
# Given lists
print("List of 1 : ", List_1)
print("list of 2 : ", List_2)

res = {}

for key in List_1:
    for value in List_2:
        res[key] = value
        List_2.remove(value)
        break
print("Dictionary from lists :\n ", res)
```

Output:

List of 1 : ['Mon', 'Tue', 'Wed']

list of 2 : [1, 2, 3]

Dictionary from lists :

{'Mon': 1, 'Tue': 2, 'Wed': 3}

Process finished with exit code 0