2. Create bold text a dictionary named “Students Data” with 5 students and id_no, name and marks as the key values. Provide the separate list of all the keys and values. Add details of one more student. Retrieve value corresponding to specific key through get method. Define a function update_detail(k) by looping over keys to search for specific key ‘k’ whose details to be updated and then update it with new details and return updated dictionary. If specific detail is not available in list print appropriate message. Convert dictionary’s keys into a list by looping through keys and appending it to the other list. Convert dictionary values into list through list constructor. Count and display total number of students in the dictionary. Remove all the details from the dictionary. Define a dictionary named “exam_data_array” with 4 keys, namely ‘name’, ‘score’, ‘attempts’ and ‘qualify’. Values for each of these 4 keys will be an 1Darray with 5 elements. by creating a dictionary named “exam_data_list” with 5 list and each list stores all 4 key-value pairs for single student.

```
print("12002040701067")

def Seperator():
  print("-----------------------------------------------------------------------------------------------------")

Students_Data = {"id_no": [1, 2, 3, 4, 5],
                 "name": ["Aeshwary", "Dhruval", "Harshad", "Hitendra", "Hunaid"],
                 "marks": [89, 85, 86, 80, 86]}
print("Retrieving Keys :")
print(Students_Data.keys())
Seperator()

print("Retriving Values :")
for value in Students_Data.items():
  print(value)
Seperator()

Students_Data["id_no"].append(6)
Students_Data["name"].append("Dev")
Students_Data["marks"].append("75")
print("After Appending :")
for value in Students_Data.items():
  print(value)
Seperator()

print("Retrieving Values Using Get Method :")
print(Students_Data.get('id_no'))
Seperator()
print("Looping Over Keys To Search For")
print("Specific Key ‘k’ Whose Details To Be Updated :")
def update_detail(k):
    if k in Students_Data.keys():
        print("Key Exist!!!, ", end=" ")
        Students_Data.update({k: 420})
        print("Value Updated =", 420)
    else:
        print("Not Exist")
    return
update_detail("id_no")
for key,value in Students_Data.items():
  print(key, ':',value)
Seperator()
```

```
print("Convert Dictionary Keys To List :")
keyslist = list(Students_Data.keys())
print(keyslist)
Seperator()

print("Convert Dictionary Values To List Using Constructor List :")
valueslist = list(Students_Data.items())
for x in range(len(valueslist)):
  print(valueslist[x])
Seperator()

print("Clearing Dictionary :")
Students_Data.clear()
print(Students_Data)
Seperator()

Exam_Data_Array = {"Name": ["Aeshwary", "Dhruval", "Harshad", "Hitendra", "Hunaid"],
                   "Score": [89, 85, 86, 80, 86],
                   "Attempts": [1, 1, 1, 1, 1],
                   "Qualify": ["Yes", "Yes", "Yes", "Yes", "Yes"]}
for key,value in Exam_Data_Array.items():
  print(key, ':',value)
Seperator()

keysarray = Exam_Data_Array.keys()
print(keysarray)
Seperator()

name = Exam_Data_Array.get("Name")
score = Exam_Data_Array.get("Score")
att = Exam_Data_Array.get("Attempts")
qua = Exam_Data_Array.get("Qualify")
print("Retrieving Values Of \"Name\" Using Get Method :")
print(name)
Seperator()

print("By Creating A Dictionary With 5 List")
print("And Each List Stores All 4 Key-Value Pairs For Single Student :")
x = range(5)
for n in x:
    name[n] = name[n], score[n], att[n], qua[n]
for x in name:
  print(x)
Seperator()

print("Length Of The Key's Element Named \"Name\":")
na = len(Exam_Data_Array.get("Name"))
print(na)
Seperator()
```

```
12002040701067
Retrieving Keys :
dict_keys(['id_no', 'name', 'marks'])
--------------------------------------------------------------------------------
Retriving Values :
('id_no', [1, 2, 3, 4, 5])
('name', ['Aeshwary', 'Dhruval', 'Harshad', 'Hitendra', 'Hunaid'])
('marks', [89, 85, 86, 80, 86])
--------------------------------------------------------------------------------
After Appending :
```

```
('id_no', [1, 2, 3, 4, 5, 6])
('name', ['Aeshwary', 'Dhruval', 'Harshad', 'Hitendra', 'Hunaid', 'Dev'])
('marks', [89, 85, 86, 80, 86, '75'])
--------------------------------------------------------------------------------
Retrieving Values Using Get Method :
[1, 2, 3, 4, 5, 6]
--------------------------------------------------------------------------------
Looping Over Keys To Search For
Specific Key ‘k’ Whose Details To Be Updated :
Key Exist!!!,  Value Updated = 420
id_no : 420
name : ['Aeshwary', 'Dhruval', 'Harshad', 'Hitendra', 'Hunaid', 'Dev']
marks : [89, 85, 86, 80, 86, '75']
--------------------------------------------------------------------------------
Convert Dictionary Keys To List :
['id_no', 'name', 'marks']
--------------------------------------------------------------------------------
Convert Dictionary Values To List Using Constructor List :
('id_no', 420)
('name', ['Aeshwary', 'Dhruval', 'Harshad', 'Hitendra', 'Hunaid', 'Dev'])
('marks', [89, 85, 86, 80, 86, '75'])
--------------------------------------------------------------------------------
Clearing Dictionary :
{}
--------------------------------------------------------------------------------
Name : ['Aeshwary', 'Dhruval', 'Harshad', 'Hitendra', 'Hunaid']
Score : [89, 85, 86, 80, 86]
Attempts : [1, 1, 1, 1, 1]
Qualify : ['Yes', 'Yes', 'Yes', 'Yes', 'Yes']
--------------------------------------------------------------------------------
dict_keys(['Name', 'Score', 'Attempts', 'Qualify'])
--------------------------------------------------------------------------------
Retrieving Values Of "Name" Using Get Method :
['Aeshwary', 'Dhruval', 'Harshad', 'Hitendra', 'Hunaid']
--------------------------------------------------------------------------------
By Creating A Dictionary With 5 List
And Each List Stores All 4 Key-Value Pairs For Single Student :
('Aeshwary', 89, 1, 'Yes')
('Dhruval', 85, 1, 'Yes')
('Harshad', 86, 1, 'Yes')
('Hitendra', 80, 1, 'Yes')
('Hunaid', 86, 1, 'Yes')
--------------------------------------------------------------------------------
Length Of The Key's Element Named "Name":
5
--------------------------------------------------------------------------------
```