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| **Ex. No. 13**  **Date:10.07.2021** | **DICTIONARY – LEVEL 2** |

**AIM:**

To write a simple python program using Dictionary.

**PROGRAMS:**

**a) Sort list of dictionaries by values in Python**

**Description:**

Get the students mark in dictionary as given below:

stud = {'IT1001':98, 'IT1002':100, 'IT1003':78, 'IT1004':89}

and sort the values in descending order.

Input Format:

First line denotes the number of entry in the dictionary

Further lines denotes the key and value

Output Format:

Values in sorted order separated with space

Constraints:

1. Limit should be positive value. If not display, "Please give positive value"

2. If limit is 0 then display "Sorry, no entry"

3. Mark should be between 0 to 100. If not display the message as "Mark should be between 0 to 100". The message should be display immediately if the mark does not satisfices the condition.

Sample Input:

4

IT1001

98

IT1002

100

IT1003

78

IT1004

89

Sample Output:

100 98 89 78

**Program:**

'''name : R.sridevi roll.no: 20uit021

Program: sort list of dictionaries by values'''

x=int(input())

if x<0:

print('Please give positive value')

elif x==0:

print('Sorry, no entry')

elif x>0:

dict1={}

temp=0

for i in range(x):

sub=input()

mark=int(input())

if mark>=0 and mark<=100:

dict1[sub]=mark

else:

print('Mark should be between 0 to 100')

temp=1

break

if temp==0:

res=list(dict1.values())

res.sort(reverse=True)

for i in res:

print(i,end=' '

**Test Cases:**

|  |  |  |
| --- | --- | --- |
| **Test Case No.** | **Input** | **Expected Output** |
| 1 | -9 | Please give positive value |
| 2 | 0 | Sorry, no entry |
| 3 | 2  IT1001  -9 | Mark should be between 0 to 100 |
| 4 | 1  IT1001  109 | Mark should be between 0 to 100 |
| 5 | 1  IT1001  100 | 100 |
| 6 | 2  IT1001  89  IT1002  100 | 100 89 |
| **Total Test Cases** | | **6** |
| **Number of Test Cases Passed** | | **6** |

**b) Merging two Dictionaries**

**Description:**

Get two dictionary and merge it.

Input Format:

Get the number of entry for the first dictionary and get the key and value

Get the number of entry for the second dictionary and get the key and value

Constraint:

1. If Number of entry is negative then display "Sorry, give positive value"

2. If Number of entry is zero then display "Sorry, entry is not possible"

Sample Input:

2

IT1001

John

IT1002

Smith

1

CS1001

William

Sample Output:

{'IT1001':'John', 'IT1002':'Smith', 'CS1001':'William'}

**Program:**

'''Name: R.sridevi

Roll No:20uit021

Program Name:Merging two Dictionaries'''

#function for get the dictionary

def get\_dict():

num=int(input())

temp = {}

if num<0:

print("Sorry, give positive value")

elif num == 0:

print("Sorry, entry is not possible")

else:

for i in range(num):

key=input()

value=input()

temp[key]=value

return temp

#function call

dict1=get\_dict()

dict2=get\_dict()

#Merging two Dictionaries

dict1.update(dict2)

#print dictionary

print(dict1)

**Test Cases:**

|  |  |  |
| --- | --- | --- |
| **Test Case No.** | **Input** | **Expected Output** |
| 1 | 0 | Sorry, entry is not possible |
| 2 | -7 | Sorry, give positive value |
| 3 | 1  IT1001  John  -7 | Sorry, give positive value |
| 4 | 1  IT1001  John  0 | Sorry, entry is not possible |
| **Total Test Cases** | | **4** |
| **Number of Test Cases Passed** | | **4** |

**RESULT:**

Thus, the Python programs are executed successfully.