

GROUP-1

NAME: SHILPA KUMARI

REGISTRATION NUMBER:12211870

ROLL NUMBER:22

PROJECT NUMBER:22

# INT108 – PYTHON PROGRAMMING PROJECT

Q. Our task was to find the name of the student with maximum marks after updation in marks and the jump in the student's rank i.e., previous rank – current rank.

You are given three lists' names, mark's and update's where:

- Names contain the names of students.
- Marks contain the marks of the same students.
- Updates contains the integers by which the marks of these students are to be updated.

(Number of levels a student is ranking up or down must be displayed)

# CODE:

```
n=int(input("Enter the no. of students\n"))

if(n==0):

    print("NO STUDENTS")

    exit()

nml=[]

mrl=[]

upl=[]

i=0

while i<n:

    name=input("Name of Student: ").upper()

    marks=int(input("Marks of Student: "))

    update=int(input("Update in marks: "))

    nml.append(name)

    mrl.append(marks)

    upl.append(update)

    i+=1

print("\n"*100)

for i in range(n-1):

    for j in range(n-i-1):

        if(mrl[j]<mrl[j+1]):

            mrl[j], mrl[j + 1] = mrl[j + 1], mrl[j]

            nml[j], nml[j + 1] = nml[j + 1], nml[j]

            upl[j], upl[j + 1] = upl[j + 1], upl[j]

print("\n\t\t\t\t\tORIGINAL RANK LIST:")

print("\nName\t\t\t\t\tMarks\t\t\t\t\tUpdate\n")

for i in range(n):

    print("{0:20s}".format(nml[i]),"{0:3d}".format(mrl[i]),"{0:20d}".format(upl[i]))

mrl=[mrl[x]+upl[x] for x in range(len(mrl))]

max1=mrl.index(max(mrl))

for i in range(n-1):

    for j in range(n-i-1):

        if(mrl[j]<mrl[j+1]):

            mrl[j], mrl[j + 1] = mrl[j + 1], mrl[j]
```

```
nml[j], nml[j + 1] = nml[j + 1], nml[j]]

print("\n\n\t\t\tUPDATED RANK LIST:")

print("\nName\t\t\tMarks\n")

for i in range(n):

    print("{0:20s}".format(nml[i]),"{0:3d}".format(mrl[i]))

print("\nStudent with the highest marks:\n"+nml[0])

print("Original rank: ",max1+1,"\nRanks jumped: ",max1)
```

# OUTPUT:

```
Enter the no. of students
10
Name of Student: SHILPA
Marks of Student: 20
Update in marks: 5
Name of Student: VINEET
Marks of Student: 28
Update in marks: 1
Name of Student: KRISH
Marks of Student: 23
Update in marks: 4
Name of Student: SADAF
Marks of Student: 23
Update in marks: 0
Name of Student: ADITI
Marks of Student: 20
Update in marks: 3
Name of Student: ROHAN
Marks of Student: 27
Update in marks: 1
Name of Student: VIDUSHI
Marks of Student: 30
Update in marks: 0
Name of Student: ANJALI
Marks of Student: 25
Update in marks: 6
Name of Student: AMAN
Marks of Student: 20
Update in marks: 6
Name of Student: VIVEK
Marks of Student: 19
Update in marks: 1
```

## ORIGINAL RANK LIST:

Name	Marks	Update
SADAF	45	2
KRISH	30	0
ROHAN	30	4
SHILPA KUMARI	26	0
VIVEK SINGH	26	3
AMAN KUMAR	25	3
VINEET KUSHWAHA	25	5
VIDUSHI	24	3
ADITI SINGH	24	0
ANJALI KUMARI	22	4

## UPDATED RANK LIST:

Name	Marks
SADAF	47
ROHAN	34
KRISH	30
VINEET KUSHWAHA	30
VIVEK SINGH	29
AMAN KUMAR	28
VIDUSHI	27
SHILPA KUMARI	26
ANJALI KUMARI	26
ADITI SINGH	24

Student with the highest marks:

SADAF

Original rank: 1

Ranks jumped: 0