

\*\*\*\*\* ASSIGNMENT NO.1 \*\*\*\*\*

Write a Python program to store marks scored in subject “Fundamental of Data Structure” by N students in the class. Write functions to compute following:

- a) The average score of class
- b) Highest score and lowest score of class
- c) Count of students who were absent for the test
- d) Display mark with highest frequency

\*\*\*\*\* CODE \*\*\*\*\*

```
Marks=[]

present=[]

absent=[]

nos=int(input("enter no of students"))

i=0

while(i<nos):

    b=input("enter Marks")

    Marks.append(b)

    i=i+1

j=0

while(j<nos):

    if(Marks[j]=="ab"):

        absent.append(Marks[j])

    else:

        b=int(Marks[j])
```

```
    present.append(b)
```

```
    j=j+1
```

```
i=0
```

```
while(i<len(present)):
```

```
    print(present[i])
```

```
    i=i+1
```

```
def averg():
```

```
    total=0
```

```
    avg=0
```

```
    i=0
```

```
    while(i<len(present)):
```

```
        total=total+present[i];
```

```
        i=i+1
```

```
    avg=total/len(present)
```

```
    print("total marks of class",total)
```

```
    print("average marks of class", avg)
```

```
def high():
```

```
    highest=0
```

```
    i=0
```

```
    while(i<len(present)):
```

```
        if(highest<present[i]):
```

```
            highest=present[i];
```

```
i=i+1
```

```
print("highest score of class",highest)
```

```
def low():
```

```
    lowest=999
```

```
    i=0
```

```
    while (i < len(present)):
```

```
        if (lowest > present[i]):
```

```
            lowest = present[i];
```

```
        i = i + 1
```

```
    print("lowest score of class", lowest)
```

```
def abs():
```

```
    print("no of absent studnet",len(absent))
```

```
def frequency():
```

```
    hf=0
```

```
    for i in range(0,len(present)):
```

```
        fr=1
```

```
        for j in range(i+1,len(present)):
```

```
            if(present[i]==present[j]):
```

```
                fr=fr+1
```

```
        j=j+1
```

```
    if(fr>hf):  
        hf=fr;  
        p=present[i]  
        i=i+1  
    print("highest frequency is",hf,"for marks",p)  
    averg();  
    high();  
    low();  
    abs();  
    frequency();
```

```
Marks=[]  
present=[]  
absent=[]  
nos=int(input("enter no of students"))  
i=0  
while(i<nos):  
    b=input("enter Marks")  
    Marks.append(b)  
    i=i+1  
  
j=0  
while(j<nos):
```

```
if(Marks[j]=="ab"):
    absent.append(Marks[j])
else:
    b=int(Marks[j])
    present.append(b)
j=j+1
```

```
i=0
while(i<len(present)):
    print(present[i])
    i=i+1
```

```
def averg():
    total=0
    avg=0
    i=0
    while(i<len(present)):
        total=total+present[i];
        i=i+1
    avg=total/len(present)
    print("total marks of class",total)
    print("average marks of class", avg)
```

```
def high():
    highest=0
```

```
i=0

while(i<len(present)):

    if(highest<present[i]):

        highest=present[i];

    i=i+1

print("highest score of class",highest)
```

```
def low():

    lowest=999

    i=0

    while (i < len(present)):

        if (lowest > present[i]):

            lowest = present[i];

        i = i + 1

    print("lowest score of class", lowest)
```

```
def abs():

    print("no of absent studnet",len(absent))
```

```
def frequency():

    hf=0

    for i in range(0,len(present)):

        fr=1

        for j in range(i+1,len(present)):
```

```

        if(present[i]==present[j]):

            fr=fr+1

            j=j+1

    if(fr>hf):

        hf=fr;

        p=present[i]

    i=i+1

    print("highest frequency is",hf,"for marks",p)

averg();

high();

low();

abs();

frequency();


Marks=[]

present=[]

absent=[]

nos=int(input("enter no of students"))

i=0

while(i<nos):

    b=input("enter Marks")

    Marks.append(b)

    i=i+1

```

```
j=0
```

```
while(j<nos):
```

```
    if(Marks[j]=="ab"):
```

```
        absent.append(Marks[j])
```

```
    else:
```

```
        b=int(Marks[j])
```

```
        present.append(b)
```

```
    j=j+1
```

```
i=0
```

```
while(i<len(present)):
```

```
    print(present[i])
```

```
    i=i+1
```

```
def averg():
```

```
    total=0
```

```
    avg=0
```

```
    i=0
```

```
    while(i<len(present)):
```

```
        total=total+present[i];
```

```
        i=i+1
```

```
    avg=total/len(present)
```

```
    print("total marks of class",total)
```

```
    print("average marks of class", avg)
```



```
def high():  
    highest=0  
    i=0  
    while(i<len(present)):  
        if(highest<present[i]):  
            highest=present[i];  
        i=i+1  
    print("highest score of class",highest)
```

```
def low():  
    lowest=999  
    i=0  
    while (i < len(present)):  
        if (lowest > present[i]):  
            lowest = present[i];  
        i = i + 1  
    print("lowest score of class", lowest)
```

```
def abs():  
    print("no of absent studnet",len(absent))
```

```
def frequency():  
    hf=0  
    for i in range(0,len(present)):
```

```
fr=1
```

```
for j in range(i+1,len(present)):
```

```
    if(present[i]==present[j]):
```

```
        fr=fr+1
```

```
    j=j+1
```

```
if(fr>hf):
```

```
    hf=fr;
```

```
    p=present[i]
```

```
    i=i+1
```

```
print("highest frequency is",hf,"for marks",p)
```

```
averg();
```

```
high();
```

```
low();
```

```
abs();
```

```
frequency();
```