In [2]:

```
import math
a=[]
n=int(input("Number of elements in array:"))
for i in range(0,n):
   l=float(input())
   a.append(l)



#mean
get_sum = sum(a)
mean = get_sum / n

print("Mean / Average is: " + str(mean))

#median

a.sort()
if n % 2 == 0:
    median1 = a[n//2]
    median2 = a[n//2 - 1]
    median = (median1 + median2)/2
else:
    median = a[n//2]

print("Median is: " + str(median))
```

```
#standard deviation
vari=0.0
for i in a:
    z=i-mean
    vari=vari+(z**2)
print("variance is:",vari)

sd=math.sqrt(vari)
print("std dev",sd)

# mode of elements


print('standardisation:')
for i in a:
    std=(i-mean)/sd
    print(std)


print('Min max normalisation')
z=a[9]-a[0]
for i in a:
    y=(1-a[0])/z
    print(y)

c=0.0
modee=0.0
for i in range(0,10):
    for j in range(i+1,10):
        if a[i]==a[j]:
            c=c+1

    if c>l:
        l=c
        modee=a[i]
if l==1:
    print("There is no mode")

else:
    print("mode",modee)
```

```
Number of elements in array:10
115.3
195.5
120.5
110.2
90.4
105.6
110.9
116.3
122.3
125.4
Mean / Average is: 121.24000000000001
Median is: 115.8
variance is: 7017.724
std dev 83.7718568494217
standardisation:
-0.3681427290722982
-0.1866975448343304
-0.1317865022359979
-0.12343047401451247
-0.07090686805089026
-0.05896968487733974
-0.008833515548427498
0.012653414163963414
0.04965868200197015
0.8864552224678619
Min max normalisation
-0.850618458610847
-0.850618458610847
-0.850618458610847
-0.850618458610847
-0.850618458610847
-0.850618458610847
-0.850618458610847
-0.850618458610847
-0.850618458610847
-0.850618458610847
mode 0.0
```

In [ ]:

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