In [1]:

```
# stats.zscore() method
import numpy as np
from scipy import stats
arr1 = [[20, 2, 7, 1, 34],
        [50, 12, 12, 34, 4]]
arr2 = [[50, 12, 12, 34, 4],
        [12, 11, 10, 34, 21]]
print ("\narr1 : ", arr1)
print ("\narr2 : ", arr2)
print ("\nZ-score for arr1 : \n", stats.zscore(arr1))
print ("\nZ-score for arr1 : \n", stats.zscore(arr1, axis = 1))



# Calculate the z-score from with scipy
import scipy.stats as stats
values = [4,5,6,6,6,7,8,12,13,13,14,18]
zscores = stats.zscore(values)
print(zscores)


# Calculate a z-score from a provided mean and standard deviation
import statistics
mean = 7
standard_deviation = 1.3
zscore = statistics.NormalDist(mean, standard_deviation).zscore(5)
print(zscore)

X=int(input("enter x value:"))
mu=int(inout("enter mu value:"))
sigma=int(input("ener sigma value:"))
z=x-mu/sigma
print(z)
```

```
arr1 :  [[20, 2, 7, 1, 34], [50, 12, 12, 34, 4]]

arr2 :  [[50, 12, 12, 34, 4], [12, 11, 10, 34, 21]]

Z-score for arr1 :
 [[-1. -1. -1. -1.  1.]
 [ 1.  1.  1.  1. -1.]]

Z-score for arr1 :
 [[ 0.57251144 -0.85876716 -0.46118977 -0.93828264  1.68572813]
 [ 1.62005758 -0.61045648 -0.61045648  0.68089376 -1.08003838]]
[-1.2493901  -1.01512945 -0.78086881 -0.78086881 -0.78086881 -0.54660817
 -0.31234752  0.62469505  0.85895569  0.85895569  1.09321633  2.0302589 ]
-1.5384615384615383
enter x value:453
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
C:\Users\WIN10~1\AppData\Local\Temp/ipykernel_9236/1103821401.py in <module>
     28
     29 X=int(input("enter x value:"))
---> 30 mu=int(inout("enter mu value:"))
     31 sigma=int(input("ener sigma value:"))
     32 z=x-mu/sigma

NameError: name 'inout' is not defined
```

In [ ]: