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In [7]: import numpy as np

data = np.array([[ 0.9526, -0.246 , -0.8856], [ 0.5639, 0.2379, 0.9104]])

#MUL VECTOR ARRAY WITH A SCALAR VALUE
print(data * 10)

#prints the dimensions of the vector
print(data.shape)

#prints the data type of the given vector
print(data.dtype)

[[ 9.526 -2.46 -8.856]
 [ 5.639  2.379  9.104]]
(2, 3)
float64
```

```
In [13]: import numpy as np

#data1 = [6, 7.5, 8, 0, 1]

#arr1 = np.array(data1)

np.array([6, 7.5, 8, 0, 1])

print(' ')

print(arr1)
```

```
[6.  7.5 8.  0.  1. ]
```

```
In [15]: # Python program to demonstrate mean()
# function from the statistics module

# Importing the statistics module
import statistics

# List of positive integer numbers
data1 = [1, 3, 4, 5, 7, 9, 2]

x = statistics.mean(data1)

# Printing the mean
print("Mean is :", x)

y = statistics.median(data1)

# Printing the Median
print("Median is :", y)
```

```
Mean is : 4.428571428571429
Median is : 4
```

```
In [16]: # Python program to demonstrate mean()
# function from the statistics module

# Importing the statistics module
from statistics import mean

# Importing fractions module as fr
# Enables to calculate mean of a
# set in Fraction
from fractions import Fraction as fr

# tuple of positive integer numbers
data1 = (11, 3, 4, 5, 7, 9, 2)

# tuple of a negative set of integers
data2 = (-1, -2, -4, -7, -12, -19)

# tuple of mixed range of numbers
data3 = (-1, -13, -6, 4, 5, 19, 9)

#To find the average of a set of fractions, integers, and mixed numbers
#convert the integers and mixed numbers to improper fractions,
#add all fractions,
#then divide the sum by the number of fractions as follows:

# tuple of a set of fractional numbers
data4 = (fr(1, 2), fr(44, 12), fr(10, 3), fr(2, 3))

# dictionary of a set of values
# Only the keys are taken in
# consideration by mean()
data5 = {1:"one", 2:"two", 3:"three"}

# Printing the mean of above datasets
print("Mean of data set 1 is % s" % (mean(data1)))
print("Mean of data set 2 is % s" % (mean(data2)))
print("Mean of data set 3 is % s" % (mean(data3)))
print("Mean of data set 4 is % s" % (mean(data4)))
print("Mean of data set 5 is % s" % (mean(data5)))
```

```
Mean of data set 1 is 5.857142857142857
Mean of data set 2 is -7.5
Mean of data set 3 is 2.4285714285714284
Mean of data set 4 is 49/24
Mean of data set 5 is 2
```