

In [1]:

In [2]: `import numpy as np`

In [3]: *#Create a NumPy array with the following values: [1, 2, 3, 4, 5].*

In [4]: `a = np.array([1,2,3,4,5])`

In [5]: `print(a)`

[1 2 3 4 5]

In [6]: *#Print the shape of the array using the .shape attribute.*

In [7]: `print(a.shape)`

(5,)

In [8]: *#Reshape the array into a 2D array with 2 rows and 3 columns.*

In [9]: `arr_2d = a.reshape(2, 3)`

ValueError

Traceback (most recent call last)

Cell In[9], line 1

----> 1 arr_2d = a.reshape(2, 3)

ValueError: cannot reshape array of size 5 into shape (2,3)

In [10]: `arr = np.array([1,2,3,4,5,6])`

In [11]: `arr_2d = arr.reshape(2, 3)`

In [12]: `print(arr_2d)`

[[1 2 3]
 [4 5 6]]

In [13]: *#Print the shape of the new array.*

In [14]: `print(arr.shape)`

(6,)

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In [15]: #Create a second NumPy array with the following values: [6, 7, 8, 9, 10].
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In [16]: b = np.array([6,7,8,9,10,11])
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In [17]: #Concatenate the two arrays together horizontally.
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In [18]: arr_concat = np.concatenate((arr.reshape(2,3), b.reshape(2,3)), axis=1)
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In [19]: #Print the resulting array.
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In [20]: print(arr_concat)

[[ 1  2  3  6  7  8]
 [ 4  5  6  9 10 11]]
```

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In [21]: #Compute the resulting array's mean, median, and standard deviation.
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In [22]: mean = np.mean(arr_concat)
median = np.median(arr_concat)
std = np.std(arr_concat)
```

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In [23]: print(mean)
print(median)
print(std)

6.0
6.0
3.0276503540974917
```

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In [ ]:
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