

In [1]:

```
import numpy as np
```

In [2]:

```
# 1. Create a NumPy array
arr1 = np.array([0,1, 2, 3, 4, 5])
```

In [3]:

```
# 2. Print the shape of the array
print("Shape of arr1:", arr1.shape)
```

Shape of arr1: (6,)

In [4]:

```
# 3. Reshape the array into a 2D array
arr2 = np.reshape(arr1, (2, 3))
```

In [6]:

```
# 4. Print the shape of the new array
print("Shape of arr2:", arr2.shape)
```

Shape of arr2: (2, 3)

In [7]:

```
# 5. Create a second NumPy array
arr3 = np.array([6, 7, 8, 9, 10, 11])
```

In [8]:

```
# 6. Concatenate the two arrays horizontally
result = np.hstack((arr2, arr3.reshape(2, 3)))
```

In [9]:

```
# 7. Print the resulting array
print("Concatenated array:")
print(result)
```

Concatenated array:
[[0 1 2 6 7 8]
 [3 4 5 9 10 11]]

In [10]:

```
# 8. Compute mean, median, and standard deviation
mean = np.mean(result)
median = np.median(result)
std_dev = np.std(result)

print("Mean:", mean)
print("Median:", median)
print("Standard Deviation:", std_dev)
```

Mean: 5.5
Median: 5.5
Standard Deviation: 3.452052529534663

In []: