In [3]:
```
import numpy as np
ex4 = np.arange(2, 25, 2)
ex4
```

Out[3]:
```
array([ 2,  4,  6,  8, 10, 12, 14, 16, 18, 20, 22, 24])
```

In [5]:
```
ex5 = np.arange(2, 25)
ex5
```

Out[5]:
```
array([ 2,  3,  4,  5,  6,  7,  8,  9, 10, 11, 12, 13, 14, 15, 16, 17, 18,
       19, 20, 21, 22, 23, 24])
```

In [6]:
```
ar1 = np.array([[1,2,3,5],[19,24,15,10],[15,22,9,21]])
ar1
```

Out[6]:
```
array([[ 1,  2,  3,  5],
       [19, 24, 15, 10],
       [15, 22,  9, 21]])
```

In [11]:
```
ex1=np.array([ [2,3,5,7],[1,9,24,15],[5,12,19,21]  ])
print(ex1)
print("Horizontally  Concatenated:",np.hstack((ar1,ex1)))
```

```
[[ 2  3  5  7]
 [ 1  9 24 15]
 [ 5 12 19 21]]
Horizontally  Concatenated: [[ 6  7  8  9  2  3  5  7]
 [20 25 16 11  1  9 24 15]
 [16 23 10 22  5 12 19 21]]
```

In [10]:
```
    print("Vertically  Concatenated:",np.vstack((ar1,ex1)))
```

```
Vertically  Concatenated: [[ 6  7  8  9]
 [20 25 16 11]
 [16 23 10 22]
 [ 6  7  8  9]
 [20 25 16 11]
 [16 23 10 22]]
```

In [ ]: