In [12]:
```
import numpy as np
a=np.array([[1,2,3,4],[5,6,7,8],[9,10,11,12]])
print(a)
```

```
[[ 1  2  3  4]
 [ 5  6  7  8]
 [ 9 10 11 12]]
```

In [13]:
```
print(a[0:3:2])
```

```
[[ 1  2  3  4]
 [ 9 10 11 12]]
```

In [14]:
```
print(a[0::2])
```

```
[[ 1  2  3  4]
 [ 9 10 11 12]]
```

In [15]:
```
print(a[1::])
```

```
[[ 5  6  7  8]
 [ 9 10 11 12]]
```

In [16]:
```
print(a[0,1:3])
```

```
[2 3]
```

In [17]:
```
print(a[2:,2:])
```

```
[[11 12]]
```

In [18]:
```
print(a[:,2])
```

```
[ 3  7 11]
```

In [20]:
```
import numpy as np
arr=np.array([1,2,4,6,5,4])
print(np.where(arr==4))
```

```
(array([2, 5], dtype=int64),)
```

In [21]:
```
arr=np.array([1,2,4,6,5,4])
print(np.where(arr%2==0))
```

```
(array([1, 2, 3, 5], dtype=int64),)
```

In [23]:
```
import numpy as np
arr=np.array([41,42,43,44])
x=[True,False,True,False]
narr=arr>42
newarr=arr[narr]
print(newarr)
```

```
[43 44]
```

In [25]:
```
a=[1,3,5,7,9]
a1=np.array(a)
b=[2,4,6,8,10]
a2=np.array(b)
print(a1+a2)
print(a1/a2)
print(a1-a2)
print(a1*a2)
```

```
[ 3  7 11 15 19]
[0.5        0.75       0.83333333 0.875      0.9        ]
[-1 -1 -1 -1 -1]
[ 2 12 30 56 90]
```

In [27]:
```
def my_fun(x,y):
    if(x,y):
        return x-y
    else:
        return x+y
vec_func=np.vectorize(my_fun)
print(vec_func(a1,a2))
```

```
[-1 -1 -1 -1 -1]
```

In [ ]: