

```
In [1]: import numpy as np
```

```
In [2]: arr8=np.arange(24).reshape(6,4)
```

```
In [4]: arr8
```

```
Out[4]: array([[ 0,  1,  2,  3],
               [ 4,  5,  6,  7],
               [ 8,  9, 10, 11],
               [12, 13, 14, 15],
               [16, 17, 18, 19],
               [20, 21, 22, 23]])
```

## Find 1st row 3rd row and 5th row

### Fancy Indexing

```
In [5]: arr8[[0,2,4]]
```

```
Out[5]: array([[ 0,  1,  2,  3],
               [ 8,  9, 10, 11],
               [16, 17, 18, 19]])
```

```
In [28]: arr=np.random.randint(low=1,high=100,size=20).reshape(4,5)
arr
```

```
Out[28]: array([[24, 79, 25, 31, 70],
               [86, 96, 49, 27, 63],
               [67, 49, 93, 23, 46],
               [ 5, 46, 67, 46, 92]])
```

```
In [30]: arr[0][2]
```

```
Out[30]: 25
```

```
In [31]: arr>50
```

```
Out[31]: array([[False,  True, False, False,  True],
               [ True,  True, False, False,  True],
               [ True, False,  True, False, False],
               [False, False,  True, False,  True]])
```

### Indexing using Boolean array

```
In [32]: arr[arr>50]
```

```
Out[32]: array([79, 70, 86, 96, 63, 67, 93, 67, 92])
```

```
In [33]: arr[(arr>50) & (arr%2!=0)]
```

```
Out[33]: array([79, 63, 67, 93, 67])
```

### Put 0 which is >50 and odd

```
In [34]: arr[(arr>50) & (arr%2!=0)]=0
```

```
In [35]: arr
```

```
Out[35]: array([[24,  0, 25, 31, 70],  
                [86, 96, 49, 27,  0],  
                [ 0, 49,  0, 23, 46],  
                [ 5, 46,  0, 46, 92]])
```

```
In [ ]:
```