

NumPy Advanced Indexing

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1 1-D Array

```
[2]: import numpy as np

#syntax 1 -> a[list]

a = np.array([10,20,30,40,50,60,70,80,90])
b = np.array([2,0,7])
x = a[b]
x
```

```
[2]: array([30, 10, 80])
```

```
[3]: #syntax 2 -> a[indexes]

b=a[[2,0,7]]
b
```

```
[3]: array([30, 10, 80])
```

2 2-D Array

```
[4]: #syntax-> a[[row indexes],[column indexes]]

a = np.array([[10,20,30],[40,50,60],[70,80,90]])
x = a[[1,2],[2,1]]
x
```

```
[4]: array([60, 80])
```

3 3-D Array

```
[5]: #syntax-> a[[which 2D array],[row indexes],[column indexes]]
```

```
a = np.  
↪array([[10,20,30],[40,50,60],[70,80,90]],[[100,110,10],[120,130,11],[140,150,12]])  
b = a[[1,0],[0,2],[2,0]]  
b
```

```
[5]: array([10, 70])
```