

Python List Slicing Cheatsheet

Collection of List slicing patterns for Python

Index (from left)	0	1	2	3	4	5	6	7	8
Index (from right)	-9	-8	-7	-6	-5	-4	-3	-2	-1
list	A	B	C	D	E	F	G	H	I
Slice (from left)	1	2	3	4	5	6	7	8	
Slice (from right)	-8	-7	-6	-5	-4	-3	-2	-1	

Notations:

```
list[:]           >> All
list[Low:]        >> Low to End
list[:High]       >> Beginning to High
list[Low:High]    >> Low to High
list[::Step]      >> Start to End with Step
list[Low::Step]   >> Low to End with Step
list[:High:Step]  >> Start to High with Step
list[Low:High:Step] >> Low to High with Step
```

Example

```
list= ['A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I']
```

Simple

```
list[3]          >> 'D'
list[-3]         >> 'G'
list[:]          >> ['A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I']
list[3:]         >> ['D', 'E', 'F', 'G', 'H', 'I']
list[:3]         >> ['A', 'B', 'C']
list[-3:]        >> ['G', 'H', 'I']
list[:-3]        >> ['A', 'B', 'C', 'D', 'E', 'F']
```

Double

```
list[-12:1]  >> ['A']
list[-12:3]  >> ['A', 'B', 'C']
list[-12:-3] >> ['A', 'B', 'C', 'D', 'E', 'F']
list[1:-8]   >> []
list[1:-11]  >> []
list[1:-6]   >> ['B', 'C']
list[2:6]    >> ['C', 'D', 'E', 'F']
```

Double with step

```
list[2:7:4]  >> ['C', 'G']
list[2:7:5]  >> ['C']
list[2:7:2]  >> ['C', 'E', 'G']
list[1:8:2]  >> ['B', 'D', 'F', 'H']
list[-7:8:2] >> ['C', 'E', 'G']
```

More variations

```
list[-1::]   >> ['I']
list[-3::]   >> ['G', 'H', 'I']
list[3::]    >> ['D', 'E', 'F', 'G', 'H', 'I']
list[::-1]   >> ['I', 'H', 'G', 'F', 'E', 'D', 'C', 'B', 'A']
list[::-4]   >> ['I', 'E', 'A']
list[::4]    >> ['A', 'E', 'I']
list[::-2]   >> ['I', 'G', 'E', 'C', 'A']
list[::2]    >> ['A', 'C', 'E', 'G', 'I']
```

Even more variations

```
list[-7::2]  >> ['C', 'E', 'G', 'I']
list[-7::3]  >> ['C', 'F', 'I']
list[1::-1]  >> ['B', 'A']
```

```
list[1::-2] >> ['B']  
list[1::-7] >> ['B']  
list[6::-3] >> ['G', 'D', 'A']
```

If you have any more patterns, ideas or suggestions, please share.

You can fork/start this at

<https://github.com/ostwalprasad/PythonListSlicingCheatsheet>

Want to build own site like this within 5 minutes?

Fork this [repository](#) and follow this nice [tutorial](#) to get
yourname.github.io website!