

## lists

May 8, 2023

```
[16]: odds = [1, 3, 5, 7]
      print ('odds are:', odds)
```

odds are: [1, 3, 5, 7]

```
[4]: print('first element:', odds[0])
      print ('last element:', odds[3])
      print("-1" element:', odds[-1])
```

first element: 1  
last element: 7  
"-1" element: 7

```
[5]: names = ['Curie', 'Darwing', 'Turing'] #Typo in Darwin's name

      print('names is originally:', names)

      names[1] = 'Darwin' # Correct the name

      print ('final value of names:', names)
```

names is originally: ['Curie', 'Darwing', 'Turing']  
final value of names: ['Curie', 'Darwin', 'Turing']

```
[6]: #name = 'Darwin'
      #name[0] = 'd'
```

```
[17]: odds.append(11)
      print('odds after adding a value:', odds)
```

odds after adding a value: [1, 3, 5, 7, 11]

```
[18]: removed_element = odds.pop(0)
      print('odds after removing the first element:', odds)
      print('removed_element:', removed_element)
```

odds after removing the first element: [3, 5, 7, 11]  
removed\_element: 1

```
[19]: odds.reverse()  
print('odds after reversing:', odds)
```

odds after reversing: [11, 7, 5, 3]

```
[20]: odds = [3, 5, 7]  
primes = odds  
primes.append(2)  
print('primes:', primes)  
print('odds:', odds)
```

primes: [3, 5, 7, 2]  
odds: [3, 5, 7, 2]

```
[21]: odds = [3,5,7]  
primes = list(odds)  
primes.append(2)  
print('primes:', primes)  
print('odds:', odds)
```

primes: [3, 5, 7, 2]  
odds: [3, 5, 7]

```
[23]: binomial_name = "Drosophila melanogaster"  
group = binomial_name[0:10]  
print('group:', group)  
  
species = binomial_name[11:23]  
print('species:', species)  
  
chromosomes = ['X', 'Y', '2', '3', '4']  
autosomes = chromosomes[2:5]  
print('autosomes:', autosomes)  
  
last = chromosomes[-1]  
print('last:', last)
```

group: Drosophila  
species: melanogaster  
autosomes: ['2', '3', '4']  
last: 4

```
[24]: date = 'Monday 4 January 2023'  
day = date[0:6]  
print('Using 0 to begin range:', day)  
day = date[:6]  
print('Omitting beginning index:', day)
```

Using 0 to begin range: Monday  
Omitting beginning index: Monday

```
[25]: months = ['jan', 'feb', 'mar', 'apr', 'may', 'jun', 'jul', 'aug', 'sep', 'oct', 'nov', 'dec']
      sond = months[8:12]
      print('With known last position:', sond)

      sond = months[8:len(months)]
      print('Using len() to get last entry:', sond)
      sond = months[8:]
      print('Omitting ending index:', sond)
```

With known last position: ['sep', 'oct', 'nov', 'dec']  
Using len() to get last entry: ['sep', 'oct', 'nov', 'dec']  
Omitting ending index: ['sep', 'oct', 'nov', 'dec']

```
[ ]:
```