

PY

August 10, 2025

1

```
[1]: name = "ada lovelace"
```

```
[2]: print(name.title())
```

Ada Lovelace

/

```
[3]: print(name.upper())
```

```
print(name.lower())
```

ADA LOVELACE

ada lovelace

```
[4]: first_name = "ada"  
last_name = "lovelace"
```

```
[5]: full_name = first_name + " " + last_name  
print(full_name.title())
```

Ada Lovelace

```
[6]: print("Python")  
  
print("\tPython")  
  
print("Languages:\nPython\nC\nJavaScript")  
  
print("Languages:\n\tPython\n\tC\n\tJavaScript")
```

Python

Python

```
Languages:
Python
C
JavaScript
Languages:
    Python
    C
    JavaScript
```

```
[7]: favorite_language = " python "

favorite_language

favorite_language.rstrip() #

favorite_language.lstrip()#

favorite_language.strip() #
```

```
[7]: 'python'
```

```
str()
```

```
[8]: age = 23

message = "Happy " + str(age) + "rd Birthday!"

print(message)
```

```
Happy 23rd Birthday!
```

2

```
[9]: bicycles = ['trek', 'cannondale', 'redline', 'specialized']

print(bicycles)

print(bicycles[0])
```

```
['trek', 'cannondale', 'redline', 'specialized']
trek
```

```
[10]: motorcycles = ['honda', 'yamaha', 'suzuki']

print(motorcycles)
```

```

motorcycles[0] = 'ducati' #
print(motorcycles)

motorcycles.append('ducati') #
print(motorcycles)

motorcycles.insert(0, 'ducati') #
print(motorcycles)

del motorcycles[0] #
print(motorcycles)

motorcycles = ['honda', 'yamaha', 'suzuki']
print(motorcycles)

popped_motorcycle = motorcycles.pop() #
print(motorcycles)
print(popped_motorcycle)

motorcycles = ['honda', 'yamaha', 'suzuki']
print(motorcycles)

first_owned = motorcycles.pop(0) #
print(f"The first motorcycle I owned was a {first_owned.title()}.")

motorcycles = ['honda', 'yamaha', 'suzuki', 'ducati']
print(motorcycles)
motorcycles.remove('ducati') #
print(motorcycles)

motorcycles = ['honda', 'yamaha', 'suzuki']
print(motorcycles)

too_expensive = 'suzuki'
motorcycles.remove(too_expensive)
print(motorcycles)
print(f"\nA {too_expensive.title()} is too expensive for me.")

```

```

['honda', 'yamaha', 'suzuki']
['ducati', 'yamaha', 'suzuki']
['ducati', 'yamaha', 'suzuki', 'ducati']
['ducati', 'ducati', 'yamaha', 'suzuki', 'ducati']
['ducati', 'yamaha', 'suzuki', 'ducati']
['honda', 'yamaha', 'suzuki']
['honda', 'yamaha']
suzuki
['honda', 'yamaha', 'suzuki']

```

The first motorcycle I owned was a Honda.

```
['honda', 'yamaha', 'suzuki', 'ducati']
```

```
['honda', 'yamaha', 'suzuki']
```

```
['honda', 'yamaha', 'suzuki']
```

```
['honda', 'yamaha']
```

A Suzuki is too expensive for me.

```
sort()
```

```
[12]: cars = ['bmw', 'audi', 'toyota', 'subaru']
      cars.sort() #
      print(cars)

      cars.sort(reverse=True) #
      print(cars)
```

```
['audi', 'bmw', 'subaru', 'toyota']
```

```
['toyota', 'subaru', 'bmw', 'audi']
```

```
sorted()
```

```
[ ]: cars = ['bmw', 'audi', 'toyota', 'subaru']
      print(sorted(cars)) #
      print(cars) #
```

```
( )
```

```
[14]: cars = ['bmw', 'audi', 'toyota', 'subaru']
      cars.reverse() #
      print(cars)
```

```
['subaru', 'toyota', 'audi', 'bmw']
```

```
[15]: len(cars) #
```

```
[15]: 4
```

3

```
[ ]: magicians = ['alice', 'david', 'carolina']
      for magician in magicians:
          print(magician)
```

3.0.1 for

-
-

range()

```
[16]: for value in range(1,5):  
        print(value)
```

```
1  
2  
3  
4
```

```
[ ]: numbers = list(range(1,6)) #    1 5  
      print(numbers)
```

```
[1, 2, 3, 4, 5]
```

```
[ ]: even_numbers = list(range(2,11,2)) #  
      print(even_numbers)
```

```
[19]: squares = []  
      for value in range(1,11):  
          square = value**2  
          squares.append(square)  
      print(squares)  
  
      #  
      squares = [value**2 for value in range(1,11)]  
      print(squares)
```

```
[1, 4, 9, 16, 25, 36, 49, 64, 81, 100]  
[1, 4, 9, 16, 25, 36, 49, 64, 81, 100]
```

```
[20]: #  
      del age, bicycles, cars, favorite_language, first_name, first_owned, full_name,  
          ↪ last_name  
      del message, motorcycles, name, numbers, popped_motorcycle, square, squares,  
          ↪ too_expensive, value
```

3.0.2

```
[21]: digits = [1,2,3,4,5,6,7,8,9,0]  
      print(min(digits)) #  
      print(max(digits)) #  
      print(sum(digits)) #
```

0
9
45

3.0.3

```
[ ]: players = ['charles', 'martina', 'michael', 'florence', 'eli']  
      print(players[0:3]) #  
      print(players[1:4]) #  
      print(players[-3:]) #  
      print(players[:3]) #  
      print(players[2:]) #
```