

# MASTER THE PYTHON INTERVIEW

What is the difference between **lists** and **tuples**?

part 1



by Nicolas Georges  
[www.master-the-interview.online](http://www.master-the-interview.online)

What is the difference between **lists** and **tuples**?

lists are **MUTABLE** and tuples are **IMMUTABLE**

- **mutable:** the value of the object can change after it has been created
- **immutable:** the value of the object can't change after it has been created
- immutable objects require less memory



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part 2



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What is the difference between **lists** and **tuples**?

## lists and tuples have different **PURPOSES**

- **lists** are **homogeneous** sequences and have **order**

```
list_of_ints = [1, 2, 3]
```

```
list_of_strings = ['a', 'b', 'c']
```

- **tuples** are **heterogeneous** sequences and have **structure**

```
user_tuple = ('John', 'Snow')
```

```
user_coord = (51.5074, 0.1278)
```

- they have different **permitted operations**



What is the difference between **lists** and **tuples**?

advanced

tuples are **HASHABLE**, lists are **NOT HASHABLE**

- **hash**
- hashable: **immutable + hash function**
- when hashable, an object can be used a key

