



Three Ways to Randomize



Python's built-in modules



Not all Python functionality loaded by default

Dozens of built-in modules that can be imported

Specialize in certain tasks



The random module



Around two dozen methods

We will discuss:

randint()

choice()

shuffle()

To import the random module, use: import random



randint()



First argument is minimum integer

Second argument is maximum integer

Returns a random integer between the two, inclusive

```
>>> import random
>>> random.randint(1, 10)
9
>>> random.randint(100, 1000)
975
>>> random.randint(55, 59)
55
>>> random.randint(-10, 0)
-5
```

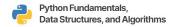


choice()



```
>>> pets = ["cat", "dog", "bird", "dinosaur"
>>> random.choice(pets)
'dinosaur'
>>> random.choice(pets)
'bird'
>>> random.choice(pets)
'cat'
>>> random.choice(pets)
'dog'
>>> random.choice(pets)
'bird'
>>> random.choice(pets)
'dog'
```

Given a sequence data type (such as a list or tuple), will return a random value from it



shuffle()



```
>>> pets = ["cat", "dog", "bird", "dinosaur"]
>>> random.shuffle(pets)
>>> pets
['dinosaur', 'bird', 'cat', 'dog']
>>> random.shuffle(pets)
>>> pets
['cat', 'dinosaur', 'dog', 'bird']
```

Given a list, will shuffle its order randomly