

RANDOM

- random: Module requires importing (default package)
- Generates random values

In [89]:

```
import random as rd
from random import *
```

In [88]:

```
rd.random()

rd.randint(10, 20)
rd.randrange(10, 100, 10)
```

Out[88]:

50

In [95]:

```
random()
randint(10, 20)
```

Out[95]:

14

In [104]:

```
[rd.randint(50, 100)]*8
```

Out[104]:

[96, 96, 96, 96, 96, 96, 96, 96]

In [111]:

```
rd.uniform(2, 3)
```

Out[111]:

2.7206053176743117

In [126]:

```
animals = ["\N{cat}", "\N{dog}", "\N{snake}", "\N{horse}"]
type(animals)
rd.shuffle(animals)
animals[0]
```

Out[126]:

'☐'

In [130]:

```
heroes = ["Batman", "Spiderman", "Ironman", "Captain America"]
villains = ["Joker", "Venom", "Thanos", "Red Skull"]

numbers = list(range(len(heroes)))
numbers
rd.shuffle(heroes) ; rd.shuffle(villains)
for i in numbers:
    print(heroes[i], "VS", villains[i])
```

Captain America VS Thanos
Ironman VS Venom
Batman VS Red Skull
Spiderman VS Joker

In [133]:

```
menu = ["noodles", "cashew with tofu", "coconut rice"]
rd.choice(menu)
```

Out[133]:

'noodles'

In [146]:

```
# probabilities = [0.25]*4
probabilities = [0.9, 0.01, 0.01, 0.08]
students = ["Gracie", "Callum", "Blaise", "Tommy"]
rd.choices(students, probabilities, k = 10)
```

Out[146]:

```
['Gracie',
 'Gracie',
 'Gracie',
 'Gracie',
 'Gracie',
 'Gracie',
 'Gracie',
 'Gracie',
 'Gracie',
 'Tommy',
 'Gracie']
```

In [156]:

```
len(rd.sample(range(1, 101), k= 100))
```

Out[156]:

100