wael dagash

WHAT IS GENERATOR?

Generator vs. list

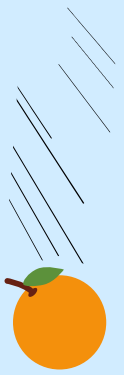
Generator

one item at a time and generates item only when in demand

Generator

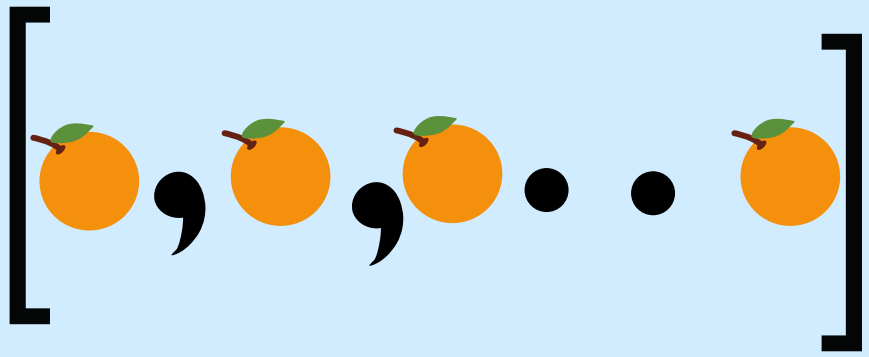
```
def pick_one_orange(total_oranges):
  orange_index = 0
  while orange_index < total_oranges:
    yield orange_index
    orange_index += orange_index
```

```
next(pick_one_orange(100))
```

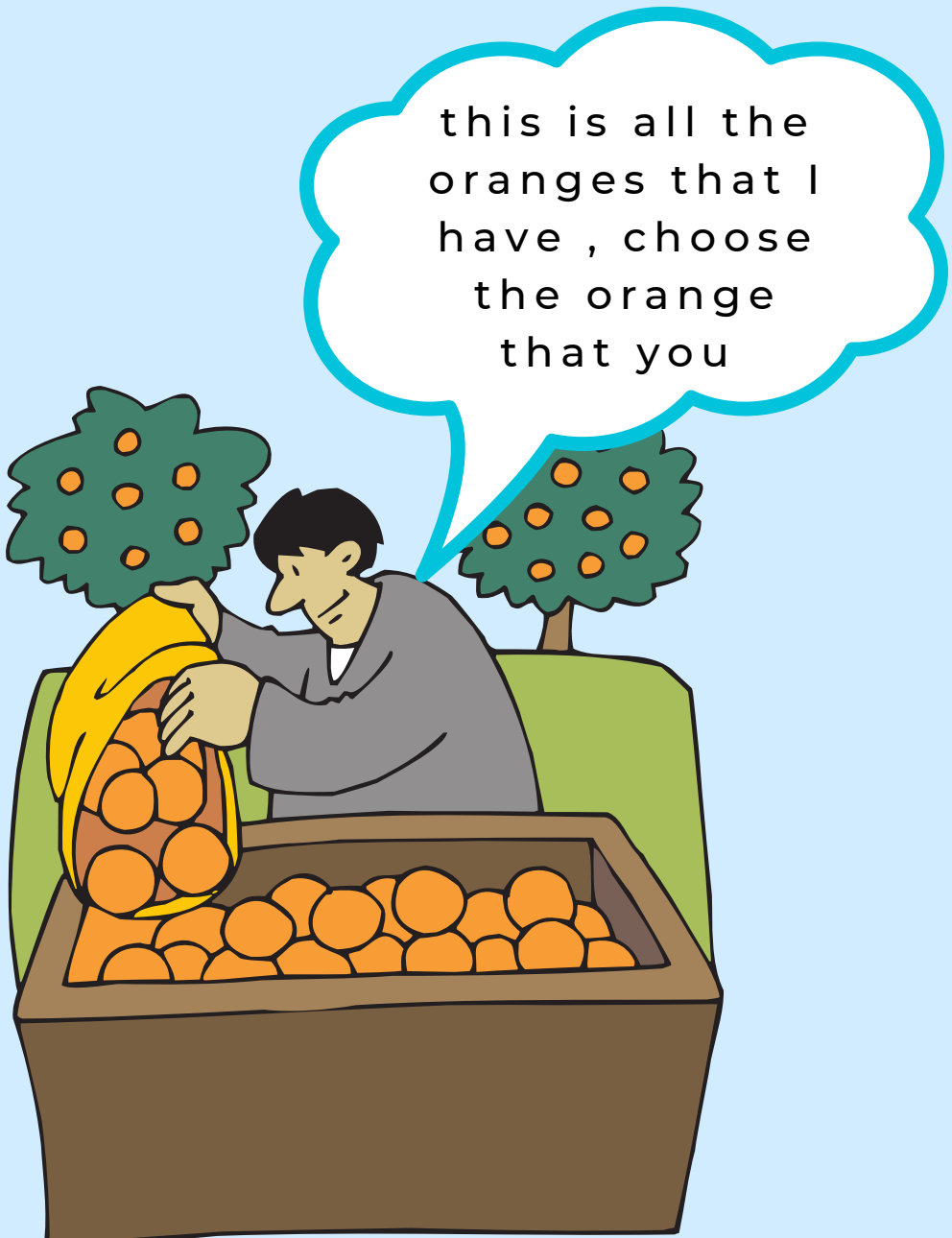


No, I want another one

List



python reserves memory for the whole list

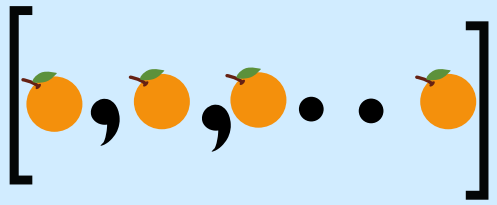


List

```
def pick_all_oranges(total_oranges):
  oranges_box = range(1,total_oranges)
  return  list(oranges_box)
```

```
pick_all_oranges(100)
```

this is all the oranges that I have , choose the orange that you want from the oranges "list"



Generator expressions are memory efficient than the lists.