

```
1 # "Parallel" lists store many facts about individual "things",
2 # each fact saved in a different list at the same corresponding index.
3
4 names = ["Mike Trout", "Albert Pujols", "Andrelton Simmons", "Martín Maldonado"]
5 hits = [123, 143, 164, 221]
6 homeRuns = [33, 23, 14, 14]
7
8 userChoice = input("Enter the name of a 2017 Angels player: ")
9
10 # Print the player's information, by locating their name
11 # in the list called "names".
12
13 playerIndex = -1
14 for i in range(len(names)):
15     if names[i] == userChoice:
16         playerIndex = i
17         break
18
19
20 # A SECOND WAY:
21 playerIndex = names.find(userChoice)
22
23
24
25 # Print the stats.
26 if playerIndex >= 0:
27     print("Statistics for", names[playerIndex])
28     print("Hits:", hits[playerIndex])
29     print("Home runs:", homeRuns[playerIndex])
30 else:
31     print("I don't know that player!")
32
```

```
1 # The way that lists are passed as parameters to functions is identical
2 # to other object types.
3
4 # To review:
5 def changeInt(x):
6     x = 10
7
8 age = 34
9 changeInt(age)
10 print(age)      # Are you willing to make a bet about what gets printed?
11
12 # The variable age is not mutated, for two reasons:
13 # 1. There is no mutation in changeInt. There is assignment.
14 # 2. The variable that is assigned to (x) is in a different namespace than
15 #    age ... there's just no way that age could be mutated.
16
17
18 # These rules apply to lists as well
19 def changeList(y):
20     y = [1, 2, 3]
21
22 lottery = [15, 7, 11]
23 changeList(lottery)
24 print(lottery)
25
26
27 # But we can actually mutate lists by passing them to functions.
28 def appendToList(y):
29     y.append(99)
30     # append is a mutation. It is a method on lists that doesn't
31     # assign a new value; it mutates the existing value.
32
33 appendToList(lottery)
34 print(lottery)
35
36 # Draw a picture of what's going on!!!
37
38
```