

Day 10 - Lists and Iteration



Well done on getting to day 10!

You've learned what a data type is, over the next two days we are going to learn about data structures, or as Python calls them, Collections. The first thing to look at is a list. A list is a variable that stores multiple bits of data. Look at the example below:

Day 10 >  main.py > ...

```
1 drone_parts = ['body', 'battery', 'propellers', 'guards', 'user manual']
```

You can make a list by creating a variable and assigning it to items inside square brackets, separated by a comma. In the above example we have a list called “drone_parts” which contains 5 items. Each item is indexed with the first item being 0. Below is an example of printing items from the list.

```
drone_parts = [0'body', 1'battery', 2'propellers', 3'guards', 4'user manual']  
print(drone_parts)  
print(drone_parts[0]) # body  
print(drone_parts[1]) # battery  
print(drone_parts[2]) # propellers  
print(drone_parts[3]) # guards  
print(drone_parts[4]) # user manual
```



Having to type multiple print functions isn't very effective. There is a cooler way to do this. We can iterate through the list using the following code:

```
for part in drone_parts:    for x in list:  
    print(part)             do something
```

The for statement says that we will “do something for each item in the list.” This is really good for automation of tasks or bulk actions. You can do something amazing things with lists. For today we are only going to be touching the surface, creating lists and reading from lists.

Another cool jungle themed example could be this “backpack” variable. We have a single variable called “backpack” and it contains some helpful items. Amazing! Let's check out today's challenge!

```
backpack = ['map', 'water bottle', 'compass', 'tello drone']  
print(backpack)  
['map', 'water bottle', 'compass', 'tello drone']
```

