

# Day 06 - Variables



Variables are one of my favorite things about programming. They save you time, make your code more versatile, and some people even think they make you jump higher (just kidding).

More great news, you have been using variables your entire life. Here are some more real life examples:

The speed limit in the suburbs vs on the highway is a variable. It varies.	(speed_limit)
Cooking temperature for different dishes.	(cooking_temperature)
Clothing sizes (S, M, L) are variables.	(clothing_size)

Variables are ways for us to label data. Let's dive into it and see what it looks like:

```
main.py x
Day 06 > main.py > ...
1 name = "Flying Lemurs"
2 drones = 6
3 class_size = 20
4 year = 2023
5
6 print(name)
7 print(drones)
8 print(class_size)
9
10 print(f"\"Our amazing {name} are a class of {class_size} amazing students.
11 We have {drones} drones in our pod. {year} is going to be awesome!\"")
```

In Python "=" means "assign" and "==" means "equals". With this in mind, we can assign data to variables by just typing a variable name and then "=" followed by the data. So in the above example we have name, drones, class\_size and year. There are some rules with variable names:

1. No spaces allow.
2. Variables can only start with a letter or "\_".
3. Variables cannot start with a number.
4. Variables are case-sensitive. "name", "Name", "NAmE" and "NAME" are four different variables.
5. Variables can only contain alpha-numeric characters and under scores.

Ok! I think you're ready for today's challenge!

