



Week 1 Day 2A



Functions, Strings, Lists, and Loops!



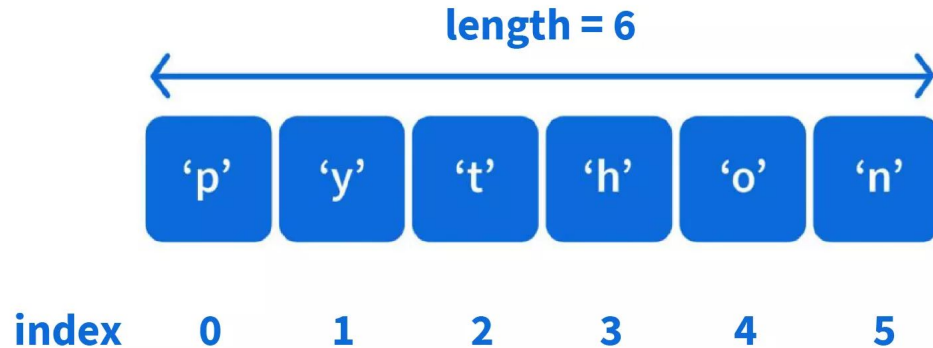
Lists

A way to store multiple items in one place!

Declaring (making) a list:

- `my_list = []` (this means the list is empty right now)
- `my_list_full = ["USA", "Belgium", "Spain", "Portugal"]`

List Operations



SCALER
Topics

Accessing an item from a list:

- `my_list[0] = ?`

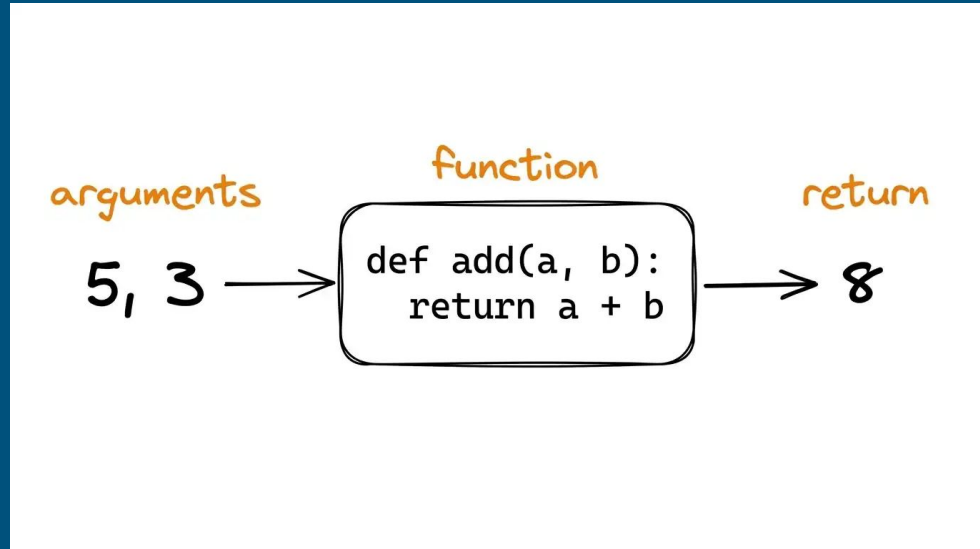
String Operations

When you use `>` `<` `>=` `<=` on **strings**:

- Python will compare using alphabetical order
- Python thinks lowercase letters are “greater than” uppercase letters

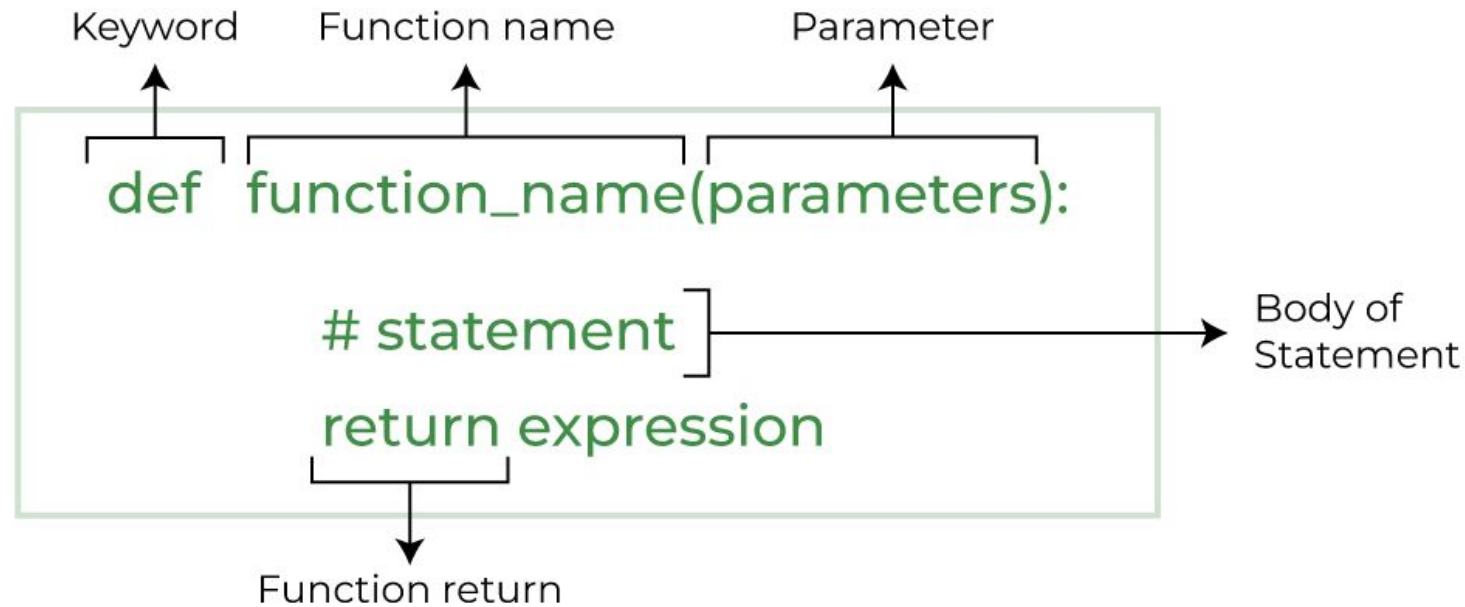
Functions in Python

Functions are a way to easily repeat the same steps of code but for different inputs.



What is a function made of?

Internal variables are used inside a function!



Variables Inside a Function

When we exit the function, you can think of the variables we used inside as disappearing!

```
def function3(x):
```

```
    y = 7
```

```
    return x*y
```

```
y = 12
```

```
result = function3(10)
```

```
print(y)
```

```
print(result)
```

Loops!

Repeating code more than one time in a row!



writing
other
letters for loops



using
"i"
for loops

For Loop

Do actions in the loop a **set number of times**

for i in range(start, stop, step):

Do something with i

...

While Loop

Do actions in the loop **while a condition (those boolean expressions from yesterday) is true.**

while (something that is true):

Do something (can use i)

...