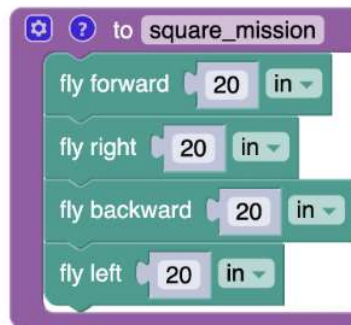Well done on getting to day 12! Only 2 more days left on this introduction journey! Today we are going to learn about functions. Functions are bits of re-usable code. Let's look at a block code example first:

We have created our own "block" called "square_mission". On the right hand side we can see what the "square_mission" block is made up of.

We have 4 navigation blocks. Looking at them you can see it's our good-old-box-mission code. A nice perfect 20in square.

Function blocks can be used over and over again.

To write a function in python we have use the following code:

```
Day 11 > 🐍 main.py > ...
1    def square():
2        print("Fly forward")
3        print("Fly right")
4        print("Fly backward")
5        print("Fly left")
6        print("What a cool square!")
```

def name_of_function():
    instructions

You start by writing def square():
Then you indent four spaces and write the actual code you want, in this case we use print statements to pretend our code does stuff.

We can now use our function as any other function (I'm looking at your print()). Now you just need to type square() and this block of code will launch. You can even ask for data to put inputted into a function like this:

```
1    def square(distance):
2        print(f"Fly forward {distance} inches")
3        print(f"Fly right {distance} inches")
4        print(f"Fly backward {distance} inches")
5        print(f"Fly left {distance} inches")
6        print("What a cool square!")
7
8    square(40)
```

Here we have a parameter called "distance". A parameter is a variable that is used inside the function. Each print statement prints an fstring that prints our the value for distance. The value is assigned on line 8: square(40) sets the distance to 40. This 40 is also known as the argument.

Today's challenge is going to be fun. You are going to make a Mad Libs function that will take in three inputs from the user and spit out a Mad Lib. Good luck! Happy coding!