

Python Crash Course 3

In this section we will learn how to deal with two types of loops. The for loop and the while loop.

What are Loops?

Loops help us repeat actions without having to write the same code multiple times. There are two main types of loops in Python:

For Loops – Used when we know how many times we want to repeat something.

While Loops – Used when we want to repeat something until a condition is met.

```
In [ ]: #This is an example of a for loop. This loop will count from i=0 to i=4, which  
for i in range(5):  
    print(f"This is loop number {i}")
```

```
In [ ]: # Create a for loop that will print all the numebrs from 0 to 20.
```

```
In [ ]: # Modify your last code using an if statement to print "We can fit more people"  
# if less than 10, or "We can't fit more people." if greater than 10.
```

```
In [ ]: # Create code that asks the user a number they would like to count up to (be  
# If their input is greater than 100 or less than 10 ask them to retype it.  
# If there number is inbetween, count up to the number.
```

While Loops

While loops are often used while waiting for a condition to be met. Such as when a certain phrase is entered, a certain time is reached, or etc.

```
In [ ]: count = 5  
  
while count > 0:  
    print(f"Countdown: {count}")  
    count -= 1 # Decrease count by 1  
  
print("Blast off!")
```

```
In [ ]: answer = ""
```

```
while answer != "python":  
    answer = input("What is the best programming language? ").lower()  
  
print("Correct! Python is awesome!")
```