

# First thing's first

1. Create a **function** for a sub sandwich order: 5 toppings
2. Create a **list** with 3 values and then add another to the start of the list using a method.

# Nation Code

## Python Fundamentals

Loops

{codenation}<sup>®</sup>

# Learning Objectives

- To understand the uses of a for loop
- To write programs using for loops

# First thing's first

Create a **function** for a sub sandwich  
order: 5 toppings



# First thing's first

Create a **function** for a sub sandwich  
order: 5 toppings

```
def sandwich_order(top1, top2, top3, top4, top5):  
    print('We are preparing your sandwich order: {}, {}, {}, {}, {}'.format(  
top1, top2, top3, top4, top5))  
  
sandwich_order("ham", "cheese", "turkey", "bacon", "tuna")
```

# Second things second

Create a **list** with 3 values and then add another to the start of the list using a method

## Second things second

Create an **array** with 3 values and then add another to the start of the array using a method

```
people = ['Sam', 'Liam', 'Stuart']
```

```
people.insert(0, 'Ezra')
```



**Everyone works differently so your code would be different to your peers, this is completely normal :)**



**Moving on. Loop de loop**

**Imagine doing the same thing over and over and over again.**

**For example, if I asked you to make me a cup of tea...**

**And then asked you again to make  
everyone in the room a cup of tea...**

**Or updating stocks in a warehouse...**

# Iteration in coding

# for loops

**If I said to you make an array of your 3 favourite drinks and log each to the console...**

- 1) I'd expect you to have a good time doing it**
- 2) I'd expect you to do something like this**



```
favourite_drinks = ["Wine", "Gin", "Water"]
```

```
print(favourite_drinks[0])
```

```
print(favourite_drinks[1])
```

```
print(favourite_drinks[2])
```

**But imagine if I said 1000 drinks**



**Let's make this code work for us.**

```
favorite_drinks = ["Wine", "Gin", "Water"]
```

```
for drink in favorite_drinks:  
    print(drink)
```

**for thing in iterable:**  
**//do stuff**

# Remember this code?

```
for i in range(10):  
    print(i)
```

# Remember that code?

'i' stands for index, but  
can be any name

Range 10  
means 0-9

```
for i in range(10):  
    print(i)
```

```
for _ in range( ):  
    #action
```



# Third things third

Generate 6 random numbers between 1–50



# Third things third

Generate 6 random numbers between 1–50

```
import random
```

```
for i in range(6):  
    print(random.randint(1,50))
```

# Forth things forth

If we can create a loop to put 0-9 on the screen, how can we count from 9 to 0?

Try it.



# Forth things forth

If we can create a loop to put 0-9 on the screen, how can we count from 9 to 0?

```
for i in range(9, -1, -1):  
    print(i)
```

# Activity:

Create an array that lists your favourite films, up to 5 elements

Add 2 more using a method

Use a loop to cycle through the array

# Learning Objectives

- To understand the uses of a for loop
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# Activity:

Displays 4 films stored in an array

Use a loop to show each film in the array

Create a function called `film_check()` that checks if the 3<sup>rd</sup> film in the array is Ghostbusters.

If it is, it should return "yey it's ghostbusters". If it isn't, it should return "booo, we want ghostbusters"