

#### 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

Python Fundamentals
Loops

{codenation}®

#### Learning Objectives

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

### {codenation}



#### 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

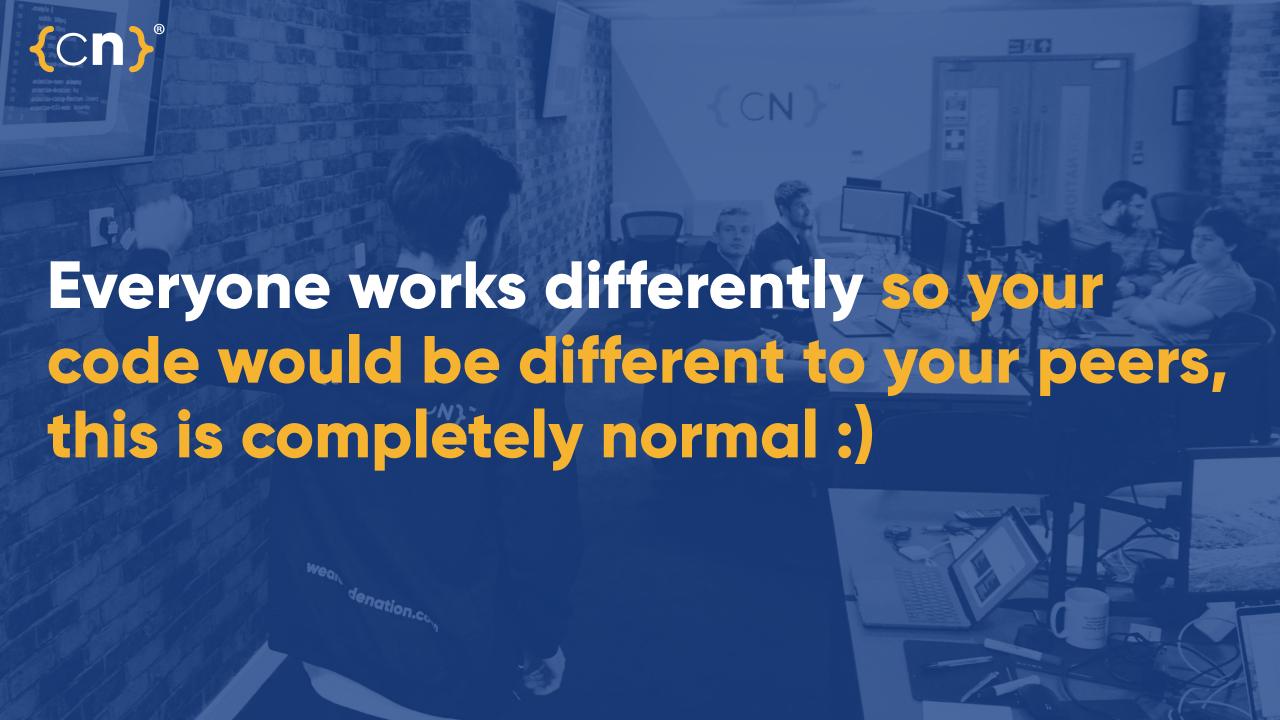


#### Second things second

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')





### Moving on. Loop de loop



## Imagine doing the same thing 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

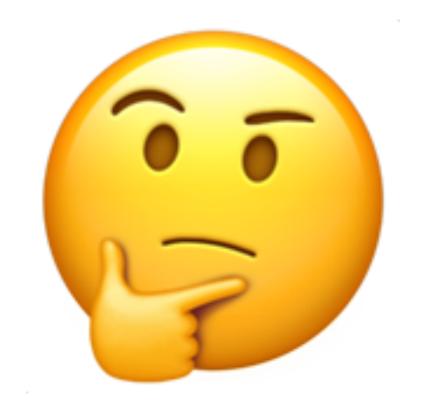


favourite\_drinks = ["Wine", "Gin", "Water"]

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 an 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

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### {codenation}

#### **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"