First thing's first

Create a function with two parameters that returns the result of multiplying the two numbers.

Then print the result

Learning Objectives

- To understand the uses of lists
- To understand the syntax of creating an lists
- To use a variety of methods to work with lists

```python
def multiply(num1, num2):
    return num1 * num2

print(multiply(2, 3))
```

Coding is all about data - storing it, retrieving it, doing stuff with it

In the real-world, we make lists

Let's see

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Coffee order :

Sam - Hot Chocolate
Andrew - Flat White
Ezra - Champagne

We can do the same thing in Python

```python
coffee_order = [
    'Sam - Hot Chocolate',
    'Andrew - Flat White',
    'Ezra - Champagne'
]

print(coffeeOrder)
```

Activity:

Make a list of your favourite songs.

3 of them.

Log to console.
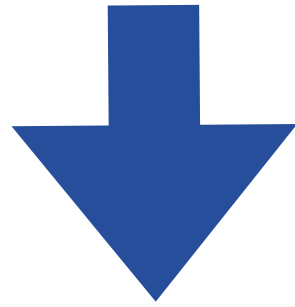
Like any good list, we can access individual items

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We use square brackets for that [ ]

```
print(coffee_order[2])
```

↓

Ezra - Champagne

But wasn't that the 3rd item?

Python starts counting at 0, so
0, 1, 2 = our 3 items in
coffee_order

Lists can be updated like variables

```
coffee_order = [
    'Sam - Hot Chocolate',
    'Andrew - Flat White',
    'Ezra - Champagne'
]


coffee_order[2] = 'Ezra - Latte'
```

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Properties work, just like in variables.

Are you getting this yet?

```python
coffee_order = [
    'Sam - Hot Chocolate',
    'Andrew - Flat White',
    'Ezra - Champagne'
]

print(len(coffee_order))
```

It will output the number of items in the list, not the number of characters

Have you ever gone shopping and just had to **add** those chocolate biscuits to the end of your list?

JavaScript's got you covered.
The .append method.

```python
coffee_order = [
    'Sam - Hot Chocolate',
    'Andrew - Flat White',
    'Ezra - Champagne'
]

coffee_order.append('Stuart - Cortado')
```

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Have you ever thought you actually don't want that pointless broccoli?

JavaScript's got you covered. The .pop method, which removes the last item from your list (array)

```python
coffee_order = [
    'Sam - Hot Chocolate',
    'Andrew - Flat White',
    'Ezra - Champagne'
]

coffee_order.pop()
```

Lots of methods available to use in lists, from **adding things,** removing things, **adding in** certain places.

.remove()

.reverse()

.sort()

.count()

.extend()

so many...

Check out the **https://docs.python.org/3** for more.

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Activity(1):

Create a list of your favourite website (3 of them), and then add another two once you've created the list. Then remove the last website.

Activity(2):

Research on the following methods: remove(), reverse(), sort(), count(), extend() (and many more). Create a program to demonstrate the uses of each method, some of these you may need more than one example. (Pay attention: not all methods would permanently updates/make changes to the arrays themselves.)