

## SECTION 6: METHODS AND FUNCTIONS, 2 hours 54 mins, 30 parts

### • 28/29 Methods and Functions Homework Overview

- -> testing skills with methods and functions
- -> **in the .ipynb file**
  - the first function one which calculates the volume of the sphere given its radius
  - -> the next cell is **one which tests that the function works after it's defined**
- -> **the next question**
  - define a function to check if a number is in a given range which returns a boolean or a statement
- -> **the next**
  - a function which inputs a string and returns the number of upper and lowercase letters in that input
  - .isupper() and .islower()
- -> **the next**
  - -> this takes a list and removes the repeats
  - -> sets are for the unique elements in a list (but we want an array returned)
- -> **the next question**
  - -> one which inputs an array and times all of the numbers in the array together
- -> **next**
  - -> write a Python function which checks if the input string is the same thing spelt backwards <- iterate through the entire thing backwards
  - -> you can use the .replace() method
- -> **next**
  - -> a Python function to check whether a string is a pangram or not
  - -> they are making you search this (for research skills) on stack overflow
  - -> a word or sentence with every letter of the alphabet at least once
    - string.ascii\_lowercase
  - -> assume there is no punctuation passed into the string
    - **we are making assumptions about the inputs all being in a certain form**