SECTION 1: COURSE OVERVIEW / 19 mins, 5 parts

- **4/5 Why Python?**
    - **-> Outline**
        - -> Python overview
        - -> what Python is and its history
        - -> why use Python
        - -> base Python vs additional libraries

    - **-> History**
        - **-> Guido van Rossum created it**
        - -> Python 3 was released in 2018
        - **-> it was designed as an easy to use language with readability**

    - **-> Why chose Python**
        - -> the syntax is easy to read (modular compared to use of braces and brackets - this language uses a lot of white space with extra brackets)
        - **-> it optimised for users -> it saves developer time, rather than computer processing time**

    - **-> What you do do with Python**
        - **-> base Python -> "batteries included" base version of Python**
        - -> in comparison to modules you can import which add extra functionality to the code
            - -> outside libraries / frameworks
            - **-> the idea is to take you from a complete beginner to understanding base Python well**

        - **-> example tasks**
            - -> **generic example tasks**
                - -> searching for files, editing them
                - -> scraping information from a website
                - -> reading and editing excel files
                - -> working with PDFs
                - -> automating emails and test messages
                - -> filling out forms

            - **-> in data / ML**
                - -> analyse large data files (scientific computing)
                - -> visualisations -> seaborn, matplotlib
                - -> performing ML tasks
                - -> predictive algorithms

            - **-> web development**
                - -> Django / Flask <u>for backend web development</u>
                - -> you can create dashboards