

### 1. Preparation for python programming at home

Watch the video guidance to learn how to install 3 different python integrated development environments (IDE), for coding at home. Watch all 3 videos and follow the steps in them. We will be using the IDEs in A-Level Computer Science. The link is below:

<https://shireland.sharepoint.com/:f/s/hubs/Computer%20Science/EjVQaygwcCRDqEO00eFArJwB0Kst7pgSsvMW3nTmyEoQWg?e=RmbIt1>

For students who are not currently at Shireland Collegiate Academy, there is a YouTube video that shows you how to install python IDLE for home use:

[https://www.youtube.com/watch?v=riL\\_xn6BKD8](https://www.youtube.com/watch?v=riL_xn6BKD8)

### 2. Python programming challenges, using Intelli-J IDE \ Learning python programming

To familiarise yourself with the Intelli-J IDE, you should re-do and code the first 20 python challenge tasks using Intelli-J. Unlike Wing IDE and IDLE IDE, Intelli-J has far more sophisticated features that will benefit you when you're coding in A-Level Computer Science. The hyperlink for the challenge tasks is below:

[https://shireland.sharepoint.com/:p/s/hubs/Computer%20Science/EYIIO\\_MXI49AjzuHkj-u74QBPF6ZCuwAijwGRrUQxjGoOg?e=70G5PV](https://shireland.sharepoint.com/:p/s/hubs/Computer%20Science/EYIIO_MXI49AjzuHkj-u74QBPF6ZCuwAijwGRrUQxjGoOg?e=70G5PV)

If you have not yet done any python programming, you will be expected to work through, and complete the lessons on GCSE python programming. There are 20 lessons here that will teach you the basics of the python programming language. Make sure you read through the presentations, rather than just copy the coding tasks. If you are learning python programming, then you should use either the IDLE IDE or Wing IDE. Intelli-J should only be used by students who have experience with programming. The link to the tutorial files are below:

[https://shireland.sharepoint.com/:f/s/hubs/Computer%20Science/EIHZP-I3UoJBs6XcxIJKhsBq87\\_V5UBc7CF6lFbezYI4A?e=AXEZq8](https://shireland.sharepoint.com/:f/s/hubs/Computer%20Science/EIHZP-I3UoJBs6XcxIJKhsBq87_V5UBc7CF6lFbezYI4A?e=AXEZq8)

For students who are new to the academy, there is a free tutorial book available called "Python Programming for the absolute beginner" Students should work through the book until they reach chapter 7:

<https://www.pdfdrive.com/python-programming-for-the-absolute-beginner-d34494394.html>

### 3. Re-familiarise yourself with the GCSE Computer Science Specification

GCSE Computer Science is the foundation for A-Level computer science and it is important that you have some knowledge and understanding of GCSE concepts before you begin A-level. There is a series of revision videos with questions that you will need to complete within the next 4 weeks. There are 15, 30-minute videos that cover the entire GCSE Computer Science specification. To ensure you've understood the content, you will be expected to score 80 or higher in each video. If you do not score 80 or higher, ask your computer science teacher to reset the video. Videos should be completed in order from 1-15 Instructions to access the revision videos are below:

- 1 - Open the url [www.edpuzzle.com](http://www.edpuzzle.com)
- 2 - Login using your username and password. If you are new, click sign up to create an account
- 3 - Click the join new class option. Enter the class code: **zigogus**
- 4 - You should see a list of the videos for completion. Click play to watch a video, then answer the multiple choice questions when asked. You do NOT need to write the notes down if a video asks. Complete the videos in numerical order (CD1, CD2, CD3.....)

During each live lesson, your computer science teacher will be available to answer any questions you may have.