



## COMPUTER SCIENCE 2025 SUMMER TASK

### PART A

A large part of the Computer Science A Level is programming. Being a confident programmer will make the course much more accessible to you.

To develop confidence in programming, it is essential that you tackle challenges or work on a project. There are some ideas along with tips to get started on the sites below:

<https://www.101computing.net/category/python-challenges/>  
<https://www.dataquest.io/blog/python-projects-for-beginners/>

You should spend at least 10 hours working on challenges or longer projects and evidence your work in a Google doc or Word document.

### PART B

As part of the A Level, you will study computing related legislation: The Data Protection Act, Copyright Designs and Patents Act, The Computer Misuse Act and RIPA (Regulation of Investigatory Powers Act).

Research each of these and find examples of real-life cases. Write a report that includes:

- The purpose of each act
- Real life examples of prosecutions for each
- How effective the act is (in your opinion)

### EXTENSION

You will be learning the web technologies: HTML, CSS and Javascript.

There are lots of resources on the web to learn these.

This link [https://isaacomputerscience.org/topics/web\\_technologies](https://isaacomputerscience.org/topics/web_technologies) gives details of the scope for A Level Computer Science, but you may choose to learn more with independent research. There are some interesting projects to try here

<https://www.101computing.net/category/html-css-javascript/>

## **PREPARATION FOR THE YEAR**

You should have 2 folders, one for component 1 and the other for component 2. Each of these will need dividers.

You will be given a suggested organisation sheet in your first lesson.

We recommend having a day folder that you bring to school containing anything you are currently learning about.

## **TOP TIPS FROM CURRENT YEAR 13 STUDENTS**

We spoke to our current Year 13 students and this was their advice for your Summer preparation:

Learn to program 'properly'. Being confident with sub-programs and arrays will put you in a strong position for the A Level. There are lots of apps with daily programming challenges. Make programming a part of your daily routine.

Think about the sort of project you may like to choose for your NEA.

<https://www.ocr.org.uk/Images/324587-project-setting-guidance.pdf>

Most of us used C# Windows forms for the project. I recommend using some time in the Summer to familiarise with C# using Visual Studio. Here's a tutorial :

<https://learn.microsoft.com/en-us/visualstudio/ide/create-csharp-winform-visual-studio?view=vs-2022>