

Subject	A Level Computer Science
Context	<p>There are two main aims of this course, the first to discover the science behind computers and computer systems. The second to learn how to develop computer software. Whilst this course will develop your ability to program, you must have experience of programming before you start in September.</p> <p>The following tasks will help you to gain an overview/refresher of the Programming Fundamentals you will need to master for the Computer Science A-level.</p>
Securing	<p>Learn how to program using Sequence, Selection and Iteration through a series of different programming challenges.</p> <p>Try to complete each task in turn using the below programming fundamentals.</p> <p>Inputs/Outputs Variables Selection Iteration Arrays File Writing String Manipulation.</p>
Processing	<p>Task 1: Your task is to learn/refresh the basics of the Python programming language. You will be using Trinket, a free online Integrated Development Environment.</p> <p>Step 1: Navigate to https://trinket.io/courses/join/GvVGK9 using Chrome on a PC.</p> <p>Step 2: Sign-up to the course</p> <p>Step 3: Once signed in, complete each of the assignments in turn, there are 11 different topics to practice.</p> <p>Videos are included to help support for each task.</p>
Exploring	<p>At A-level, the main programming language is Python. We do study other languages and the following sources are a good place to start</p> <p>Use W3schools to work through the following tutorials</p> <p>SQL: SQL Tutorial (w3schools.com) HTML: HTML Tutorial (w3schools.com)</p> <p>Reading: Stack Overflow is a question-and-answer site for professional and enthusiast programmers. As your experience of programming grows, you will be surprised how often you end up here.</p>
Reviewing	<p>Reflect on what you have learned through this work by doing the following:</p> <ul style="list-style-type: none"> • Note down 5 new things that you found most interesting • What did you find most challenging and what did you feel most confident with? • Write down 3 questions that you would like to ask your teacher about the topic area(s) that you have been introduced to