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Alevel Computer Science

Term	Date	Focus	Summary	Learning Outcomes
Term 2	02/01/23	Consequences of using computers DIRT	Moral, ethical, legal and cultural issues Mock reflection	To discuss the consequences of using computers from moral, ethical, legal and cultural aspects
	09/01/23 16/01/23 23/01/23			Mocks
	30/01/23	Programming and Algorithms	Programming fundamentals	Creating programs that use a variety of skills needed within the Alevel course
	06/02/23		Programming fundamentals	Creating programs that use a variety of skills needed within the Alevel course
	13/02/23			
	20/02/23	Programming and Algorithms and Data Structures	Trace tables Arrays Global and local variables	Ability to trace through an algorithms and evidence changes to data Advanced uses of 1d and 2d arrays Analysing the uses of local and global variables
	27/02/23		External Data User defined data types Validation	Creating programs that read and write to external files Exploring enumerate Exploring how to prevent a variety of errors including run time errors
	06/03/23	Data Structures	Sorting and searching The roles of variables Fundamentals of Structured programming approaches Logic bit and set operators	Tracing and programming merge and bubble sorts Further understanding structured programming Analysis bitwise operators
	13/03/23	Theory of Computation	Computational thinking Problem solving Algorithm design	Reviewing the steps of computational thinking and problem solving strategies
	20/03/23		Abstraction and automation Finite State Machines Assessment and DIRT	Understanding abstraction and how automation can be used within Computing Creation of FSM including Meley machines and state transition diagrams.