



High Tunstall College of Science Curriculum Intent

Topic:	Application of Computational Thinking Topic 6: Problem Solving with Programming <i>String formatting and searching (Linear)</i>	Year:	10	Half Term:	4
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	Progress		
Key Ideas	R	A	G
I can format output to meet requirements			
I can format output suitable for the end user			
I can define the term 'array'			
I can define the term 'list'			
I can give characteristics of one-dimensional and two-dimensional data structures			
I can use indexing to access any item in a two-dimensional structure			
I can use 'for' to iterate over every item in a two-dimensional structure			
I can validate input using presence check, length check, range check, and look-up check			
I can apply a linear search to a one-dimensional list (paper)			
I can complete a linear search algorithm in a flowchart			
I can write a linear search for a single item in a one-dimensional list (code)			
I can apply a linear search to a two-dimensional list (paper)			
I can complete a linear search algorithm in a flowchart			
I can write a linear search for a single record in a two-dimensional list (code)			

Lesson	Learning Focus	Assessment	Key words
1 (CT19)	Format output to meet requirements Format output suitable for the end user	Evidence in Teams End of topic assessment	Alignment, Format, Iterate, Output, Placeholders, String.format(), Symbols, Tables, User-friendly
2 (CT20)	Define the term 'array' Define the term 'list' Give characteristics of one-dimensional and two-dimensional data structures Use indexing to access any item in a two-dimensional structure Use 'for' to iterate over every item in a two-dimensional structure	Evidence in Teams End of topic assessment	Array, Data structure, For-loop, Indexing, Iterate, List, One-dimensional, Structure, Two-dimensional,
3 (CT21)	Validate input using presence check, length check, range check, and look-up check	Evidence in Teams End of topic assessment	Length-check, Lookup check, Presence check, Range-check, Required fields, Whitelist
4 (CT22)	Apply a linear search to a one-dimensional list (paper)	Evidence in Teams End of topic assessment	Algorithm, Flowchart, "Human-friendly", Linear

	<p>Complete a linear search algorithm in a flowchart</p> <p>Write a linear search for a single item in a one-dimensional list (code)</p>		search, Loop, One-dimensional list, Search
5 (CT23)	<p>Apply a linear search to a two-dimensional list (paper)</p> <p>Complete a linear search algorithm in a flowchart</p> <p>Write a linear search for a single record in a two-dimensional list (code)</p>	<p>Evidence in Teams</p> <p>End of topic assessment</p>	Algorithm, Data, Database, Linear search, Record, Search, Two-dimensional structure,
6 (CT24)	<p>Revision lesson</p> <p>All of the above</p>	<p>Evidence in Teams</p> <p>End of topic assessment</p>	All of the above
7 (CT24)	End of topic Assessment	End of topic assessment	All of the above
8 (CT24)	Assessment feedback lesson	Evidence in Teams	All of the above