

Topic 8: Programming

Keyword sheet - Cambridge IGCSE Computer Science 0984. Tick each term once you can define it from memory.

Keyword	Definition	Know it?
Variable	Named memory location that stores a value which can change during execution.	
Constant	Named memory location holding a value that cannot change during execution.	
Data types	INTEGER (whole number), REAL (decimal), CHAR (single character), STRING (text) and BOOLEAN (TRUE/FALSE).	
Assignment	Storing a value in a variable, e.g. $x \leftarrow 5$.	
Arithmetic operators	+, -, *, /, ^, DIV (integer division), MOD (remainder).	
Comparison operators	=, <>, <, >, <=, >= ; compare two values and return a Boolean.	
Logical operators	AND, OR, NOT; combine or reverse Boolean conditions.	
Input / output	Reading data into a program (INPUT) / displaying data (OUTPUT).	
Sequence	Instructions executed in the order they are written.	
Selection	Choosing which code runs depending on a condition: IF...THEN...ELSE and CASE.	
Iteration	Repeating code: FOR (count-controlled), WHILE (pre-condition) and REPEAT...UNTIL (post-condition, runs at least once).	
Nested structure	A selection or iteration structure placed inside another.	
Array	Fixed-size collection of items of the same data type, each accessed by an index.	
Index	The position number of an element in an array.	
1D / 2D array	A single list of values / a table of values accessed by row and column indices.	
Procedure	Named sub-program that performs a task and does not return a value.	
Function	Named sub-program that returns a value.	
Parameter / argument	A variable in a subprogram definition that receives a value / the actual value passed when it is called.	
Local variable	Variable declared within a subprogram and only accessible there.	
Global variable	Variable declared outside subprograms and accessible throughout the program.	
Library routine	Pre-written, tested subprogram that can be used in a program, e.g. ROUND, RANDOM.	
String handling	Operations on text: LENGTH, SUBSTRING, UCASE, LCASE, concatenation.	
Concatenation	Joining two or more strings together.	

Keyword	Definition	Know it?
File handling	Opening, reading from, writing to and closing text files to store data permanently.	
Comment	Non-executable text in code to explain how it works.	