

AQA Computer Science GCSE

3.2.2 Programming Concepts

Flashcards

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What are programming concepts?



What are programming concepts?

The basic building blocks used to write and organise computer programs, such as variables, loops, and decisions.



What is a variable declaration?



What is a variable declaration?

A statement that creates a variable to store data.

Example: `score = 0`



What is a constant declaration?



What is a constant declaration?

A named value that does not change while the program runs.

Example: $\pi = 3.14$



What is assignment in programming?



What is assignment in programming?

Giving a value to a variable, or updating it.

Example: $\text{total} = \text{total} + 1$



What is definite (count-controlled) iteration?



What is definite (count-controlled) iteration?

A loop that repeats a fixed or known number of times.

Example: $\text{FOR } i \leftarrow 1 \text{ TO } 5$



What is indefinite (condition-controlled) iteration?



What is indefinite (condition-controlled) iteration?

A loop that repeats until or while a condition is met.

Examples: WHILE notDone, REPEAT ...
UNTIL done



What is nested iteration?



What is nested iteration?

A loop inside another loop.



What is selection in programming?



What is selection in programming?

Making decisions using IF, ELSE IF, and ELSE statements.



What is nested selection?



What is nested selection?

An IF statement inside another IF statement.



What is a subroutine?



What is a subroutine?

A named block of reusable code, also called a procedure or function.



What is a parameter in a subroutine?



What is a parameter in a subroutine?

A value passed into the subroutine to use in its execution.



Why are meaningful identifier names important?



Why are meaningful identifier names important?

They make code easier to read, understand, and maintain.



Give an example of a good
identifier name.



Give an example of a good identifier name.

totalScore (better than 'x' or 'num' or 'temp')

