AQA Computer Science GCSE 3.2.10 Structured Programming and Subroutines

Flashcards

What is structured programming?

What is structured programming?

A way of writing programs using sequence, selection, iteration, and modular subroutines for clarity and efficiency.

What are the three core principles of structured programming?

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Sequence, Selection, Iteration.

What is a subroutine?

What is a subroutine?

A named block of reusable code that performs a specific task.

What is the difference between a procedure and a function?

What is the difference between a procedure and a function?

A procedure may or may not return a value, usually just performing an action; a function always returns a value.

What is a parameter in a subroutine?

What is a parameter in a subroutine?

A value passed into the subroutine to be used during its execution.

What is a return value?

What is a return value?

A value that is passed back from a function to the part of the program that called it.

What is a local variable?

What is a local variable?

A variable declared inside a subroutine, only accessible within that subroutine. They only exist while the subroutine is executing.

Why are local variables useful?

Why are local variables useful?

They avoid naming conflicts and keep data isolated to where it's needed.

Give two advantages of using subroutines.

Give two advantages of using subroutines.

They make code modular and reusable, and improve readability and maintenance.

What does modular design mean?

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The program is broken into independent, manageable parts (subroutines).

Why is structured programming good for testing?

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Subroutines can be tested independently of the rest of the program.

How does structured programming help with debugging?

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Isolated subroutines make it easier to find and fix errors.