

AQA Computer Science GCSE

3.2.1 Data Types

Flashcards

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What is a data type?



What is a data type?

Defining what kind of data a variable holds and how it should be stored and processed.



Name the 5 data types.



Name the 5 data types.

Integer, Real, Boolean, Character,
String.



What is an Integer (int)?



What is an Integer (int)?

A whole number with no decimal part.

Example: -10, 0, 25



What is a Real (float)?



What is a Real (float)?

A number that includes a decimal or fractional part.

Example: 3.14, -0.5



What is a Boolean (bool)?



What is a Boolean (bool)?

A data type with only two possible values: True or False.



What is a Character (char)?



What is a Character (char)?

A single letter, digit, or symbol enclosed in quotation marks.

Example: "A", "5", "#"



What is a String (str)?



What is a String (str)?

A sequence of characters enclosed in quotes.

Example: "Hello", "123", "£\$%"



Why are data types important?



Why are data types important?

They ensure the correct storage, processing, and use of data in a program.



What could go wrong if the wrong data type is used?



What could go wrong if the wrong data type is used?

The program may produce errors or incorrect outputs (e.g. trying to divide strings).



What is the name for real
numbers in many
programming languages?



What is the name for real numbers in many programming languages?

Float.



What is the difference
between 123 and “123”?



What is the difference between 123 and “123”?

123 is an integer and can be used for arithmetic calculations, whilst “123” is a string.

