

The = 4.0) ^^  
character (a, f,

Literature, Russian Literature



The most commonly supported data types in programming

languages are: **Integer** Data can be either numbers, characters or

logical **Integer** (whole number 4, 27, 65535) 1 to 8 bytes Most

programming languages have different data types for whole and real

numbers. This is because they are represented differently inside the

computer. Whole numbers, called integers (and 'int' for short in various

programming languages), are represented as single sets of binary numbers

inside a computer. A variety of mathematical operations (e.

g. addition, multiplication and division) can be done to these as they fall

under the number data type. **Floating point** (decimal number 4. 2, 27.

4, 5. 63) 4 to 8 bytes Any numbers which have decimal points, called real or

floating point numbers (and 'float', 'single', 'double', 'real' or 'longreal' in

various other instances), are usually represented using floating point

representation inside a computer. This is where the number is split into two

parts: the main number (everything before the decimal point) and the

fractional part (everything after the decimal point), both of which are binary

numbers.

A variety of mathematical operations (e. g. addition, multiplication and

division) can be done to these as they fall under the number data type.

**Is this what is on the BBC website??** It is important to note that adding

two real numbers will always result in a floating point number (e. g.  $1.5 + 2.5$

$= 4.$

**Character** (a, F, 3, \$, £, #) 1 byte Data which is a character (or 'char')

can be any character from a specific character set, such as ASCII or

<https://assignbuster.com/the-40-character-a-f/>

Unicode, represented by its own binary pattern. Characters can be letters, digits or punctuation marks, and even tabs or spaces. \*\*\*Operations?

\*\*\* \*^\*^\* String(abc, hello world) Limited to the amount that can be stored in main memory Ordered sequences of more than one character in length are called strings. These can be made of any combination of either different or repeated characters. There is usually a restriction on the length of a string, which is how many characters it contains, and empty strings - strings with no characters in them and therefore a length of 0 - are also possible. All keyboard input and text output is in the form of character

strings. \*\*\*Operations?\*\*\* \*^\*^\*\*\*\*\*BOOLEAN\*\*\* Boolean(true or false) 1 bit The Boolean data type is used for True or False values.

These are the only two states which are possible for this data type. Most programming languages will use the terms True and False for Boolean data but it is actually represented as 1 (True) or 0 (False) in a computer. This means it takes up only 1 bit of space.