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» You can assign a value of any type at any time to a variable

Basic data types

- Integer
- Real number
- Character
- Boolean
- String

Integers

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- Operations that can be applied to integers are the standard arithmetic and relational operations.

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- Many high-level languages have two sizes of real numbers.
- The operations that can be applied to real numbers are the same as those that can be applied to integer numbers.

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- Two bytes represent each character in the Unicode character set.
- The English alphabet is represented in ASCII, which is a subset of Unicode.

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- Comparing characters **does** make sense, so the relational operators can be applied to characters.
- The meanings of "less than" and "greater than" when applied to characters are "comes before" and "comes after" in the *character set*.

Booleans

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- The logical operators

» and, or, not, equal, not equal

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 - » For example: "This is a string."
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- The operations defined on strings vary from language to language.

> They include concatenation of strings and comparison of strings in terms of lexicographic order.

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• A statement that associates an **identifier** with a variable, an action, or some other entity that can be given a name within the language.

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- The programmer can then refer to that item by its name.

Reserved words

 A word in a language that has special meaning. These words CANNOT be declared to be anything else.

Case sensitivity

• Some languages are NOT case-sensitive

» UPPERCASE and lowercase letters are considered the same.

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 Most manipulation of data occurs in assignment statements