Primitive data types

Complete C# Masterclass by Denis Panjuta

Integral

sbyte x = 1; range from -128 - 127

short x = 1; range from -32,768 - 32,767

integer x = 1; range from -2,147,483,648 - 2,147,483,647

long x = 1; range from –9,223,372,036,854,775,808 to 9,223,372,036,854,775,807

Choose the smallest type your value fits into.

Floating point

float x = 0.5f; range from 1.5 × 10^−45 - 3.4 × 10^38, **7-digit precision**

double x = 0.5; range from 5.0 × 10^−324 - 1.7 × 10^308, **15-digit precision**

decimal x = 0.5m; range from –7.9 × 10^−28 - 7.9 × 10^28, **28-digit precision**

Use float for 3D graphics, double for everything (except money calculations) and decimal for financial applications.

Boolean

bool switch = true;

Use a boolean if you want to set something to true or false (just like a toggle).

Unicode characters and strings

char c = ‘A’;

string name = “John Doe”;

Use a string for a path, username, birthdate...