Arduino programming language can be divided in three main parts: functions, values (variables and constants), and structure.

FUNCTIONS

For controlling the Arduino board and performing computations.

Digital I/O	Analog I/O	Time	Communication
digitalRead() digitalWrite() pinMode()	analogRead() analogReference() analogWrite()	delay() delayMicroseconds() micros() millis()	Serial Stream

VARIABLES

Arduino data types and constants.

Data Types	Variable Scope & Qualifiers	Conversion
array bool	const	(unsigned int) (unsigned long)

boolean byte char double float int long short size_t string String() unsigned char unsigned int unsigned long void word	scope static volatile	byte() char() float() int() long() word()

STRUCTURE

The elements of Arduino (C++) code.

Sketch loop()	Control Structure	Bitwise Operators & (bitwise and)	Further Syntax #define (define)

setup()	break continue do...while else for goto if return switch...case while	<< (bitshift left) >> (bitshift right) ^ (bitwise xor) | (bitwise or) ~ (bitwise not)	#include (include) /* */ (block comment) // (single line comment) ; (semicolon) {} (curly braces)