

Bit - 1&0 : 2 values

Byte - 8 bits : 256 values

8 bit character "char" - numbers from -127 to 127, ascii characters

Signed 16 bit integer "int" : 2 bytes 65,535 values,
-32,768 to 32,767

Signed 32 bit integer "long" : 4 bytes 4,294,967,295 values
-2,147,483,648 to 2,147,483,647

32 bit floating point "float" : 4 bytes, 15 decimal places

Default analogRead and analogWrite : 10 bytes, 1024 values

0-255 is 256 values. Always include 0.

Always pick the best type for your needs.

float j = 2.00

float k = 10.00

int temp1 = j/k = 0

float temp2 = j/k = 0.2

1 bits = 2 values

2 bits = 4

3 bits = 8

4 bits = 16

5 bits = 32

6 bits = 64

7 bits = 128

8 bits = 256

9 bits = 512

10 bits = 1024

11 bits = 2048

12 bits = 4096

13 bits = 8192

14 bits = 16384

15 bits = 32768

16 bits = 65536