goto

[Control Structure]

Description

Transfers program flow to a labeled point in the program

Syntax

label:

goto label; // sends program flow to the label

Example Code

for (byte r = 0; r < 255; r++) {

for (byte g = 255; g > 0; g--) {

for (byte b = 0; b < 255; b++) {

if (analogRead(0) > 250) {

goto bailout;

}

// more statements ...

}

}

}

bailout:

// more statements ...

Notes and Warnings

The use of goto is discouraged in C programming, and some authors of C programming books claim that the goto statement is never necessary, but used judiciously, it can simplify certain programs. The reason that many programmers frown upon the use of goto is that with the unrestrained use of goto statements, it is easy to create a program with undefined program flow, which can never be debugged.

With that said, there are instances where a goto statement can come in handy, and simplify coding. One of these situations is to break out of deeply nested [for](https://www.arduino.cc/reference/en/language/structure/control-structure/for) loops, or [if](https://www.arduino.cc/reference/en/language/structure/control-structure/if) logic blocks, on a certain condition.