

Cheatography

Arduino Cheat Sheet by Knoddy via cheatography.com/147755/cs/32140/

Variables

Strings String variableName = "Text";
 ;
Integers int variableName = 0;
Doubles double variableName = 0.1;
Longs long variableName = 999999999;
Booleans boolean variableName = false;

You can also create empty variables by default by omitting the equals sign.
For example, String variableName;
will create a new empty String variable.

Arrays

Array string[4] array;
that
can
hold 4
Strings

Array string[3] array = {"Banana apple"}
with
pre-set
content

Access array[n];
the nth
value
of an
array

Assign array[n] = "Pear";
a value
to an
array

Changing Values

Create a new String variable

Assign "-Pear" to the variable

This method works for other variable types, too. Keep in mind of the data type that you are assigning to a variable, though. You cannot assign "Pear" to an int, for example.

While Loops

Functions

Declare a function // code here
 }
Declare a function that returns an int
 int myFunc() {
 return 1;
 }
Declare a function that takes a String parameter
 void myFunc (String param) {
 // code here
 }

Store the value of a function in a variable
 int variableName = myFunc();
 ;

Combine these concepts to create different types of functions that suit your needs. You can have a function that returns an int value with a String parameter, for example. Use void if your function doesn't return anything.

Arduino

Set digital pin n to INPUT.

Set digital pin n to OUTPUT.

Read digital pin n (returns boolean)

Write to digital pin n (LOW or HIGH)

Read value of analog pin A0 (returns int)

Encoder

Create a new encoder plugged in pins 2 and 3

Read encoder (returns long)

Write to encoder

Motor

While loops will repeatedly run the code inside it until the condition is false, in which the loop will stop and the code after it will continue.

```
while (condition) {  
    // code here  
}
```

Create a new Adafruit_DCMotor *myMotor = AFMSS.getMotor(1);
motor plugged into port M1

Set speed of motor->setSpeed(100);
a motor (0-255)

Change motor direction (FORWARD,
BACKWARD,
RELEASE)

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