

# ChickBot Arduino quick reference chart

Action	Command to use
Beep & flash the LED	SoundAndLEDAAlert();
Wait for the button to be pressed	WaitForButtonPress();
Delay in milliseconds	delay( 1000 );
Stop all motors	AllStop();
Go forward - example, 10 cm. Note the *	GoForward( 10 * cm );
Go backward	GoBackward( 10 * cm );
Turn on the spot - example shows 90° to the left	HardTurn( hardTurn90, Left );
Turn around a wheel - example shows 90° to the right	SoftTurn( softTurn90, Right );
The soft & hard turn angles can not be mixed up, only use hardTurn90 with a HardTurn. As they are just numbers, you can use maths to calculate other angles - e.g. softTurn90 / 2 would be 45°	
Play a tune with a name	PlayTune( DumDeDe );
Define a tune - note, duration (in beats)	int PuppyPower[] = { NOTE_F3, 8, NOTE_G3, 8, NOTE_A3, 8, NOTE_C4, 4, NOTE_A3, 8, NOTE_C4, 4, 0, 0 };

Sample conditions for control structures:

Variable == 10, Variable1 == Variable2, Variable > 10

Control type	Template code
The IF statement	<pre> if ( condition ) {     // do this } else if ( another condition ) {     // do this } else {     // otherwise do this } </pre>
The FOR loop	<pre> for (     int counter = 1;        // Setup a counter     counter &lt;= 3;          // Keep going whilst counter is less than or equal to the number of times required     counter = counter + 1 // Each time we do this loop, add one to the counter ) {      // do stuff  } // for - this is the bottom of the for loop </pre>
The FOR loop in short	<pre> for (int c = 0; c &lt; 3; c++) {      // do stuff  } </pre>
The WHILE loop	<pre> while( condition ) {      // do stuff  } // while </pre>