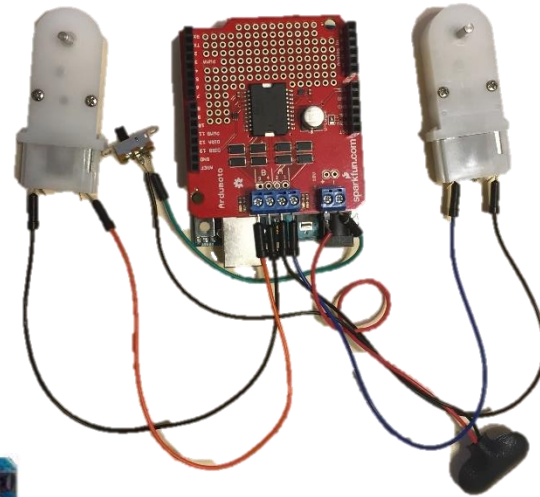
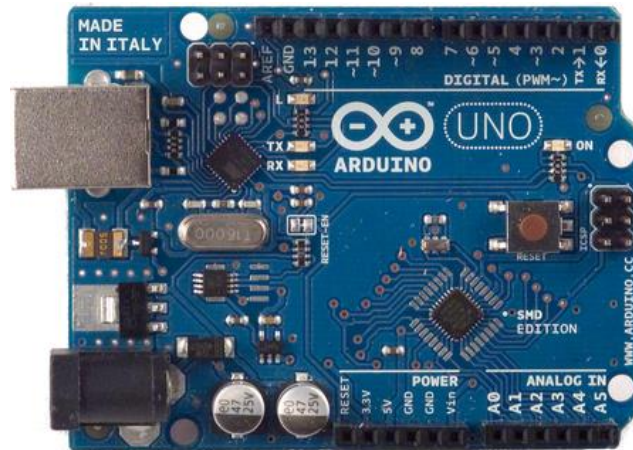
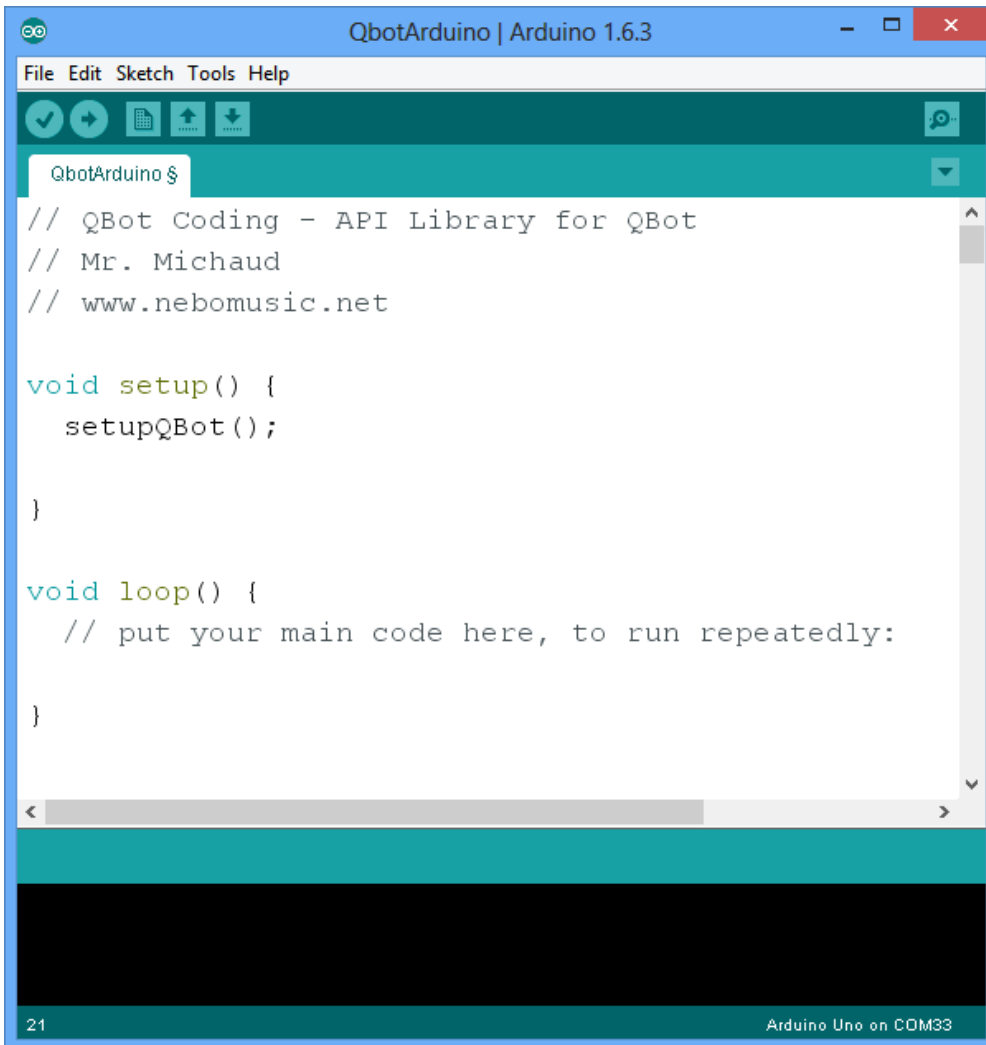


# Programming QBot with Arduino / Java



# Open QbotArduino

A screenshot of the Arduino IDE interface. The window title is "QbotArduino | Arduino 1.6.3". The menu bar includes "File", "Edit", "Sketch", "Tools", and "Help". Below the menu bar is a toolbar with icons for checkmark, undo, redo, upload, and download. The main text area contains the following code:

```
QbotArduino $
// QBot Coding - API Library for QBot
// Mr. Michaud
// www.nebomusic.net

void setup() {
  setupQBot();
}

void loop() {
  // put your main code here, to run repeatedly:
}
```

The status bar at the bottom shows "21" on the left and "Arduino Uno on COM33" on the right.

Code in  
setup() to run  
one time

Code in loop()  
to have the  
QBot run  
continuously

# Available Functions for QBot

```
forward(power, time);    left(power, time);  
forward(power);          left(power);  
backward(power, time);  right(power, time);  
backward(power);         right(power);
```

```
stopMotors();
```

```
motorA(power);
```

```
motorB(power);
```

**Power: Range from -255 to 255**

**0 is stop**

**Time: Milliseconds**

```
delay(time);
```

# Sample Program

```
void setup() {  
  setupQBot();  
  
  // Move around  
  forward(255, 1000);  
  stopMotors();  
  left(255, 1000);  
  stopMotors();  
  
}
```

# Loop: Repeat a Section of Code in Java

```
// Loop
for (int i=0; i<4; i++) {
    forward(255, 1000);
    delay(500);
    left(255, 1000);
    delay(500);
}
```

# Defining Functions in Java

```
void driveSquare() {  
    for (int i=0; i<4; i++) {  
        forward(255, 1000);  
        delay(500);  
        left(255, 1000);  
        delay(500);  
    }  
}
```