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Introduction To Microcontrollers Electronics – Lesson 1: The Introduction

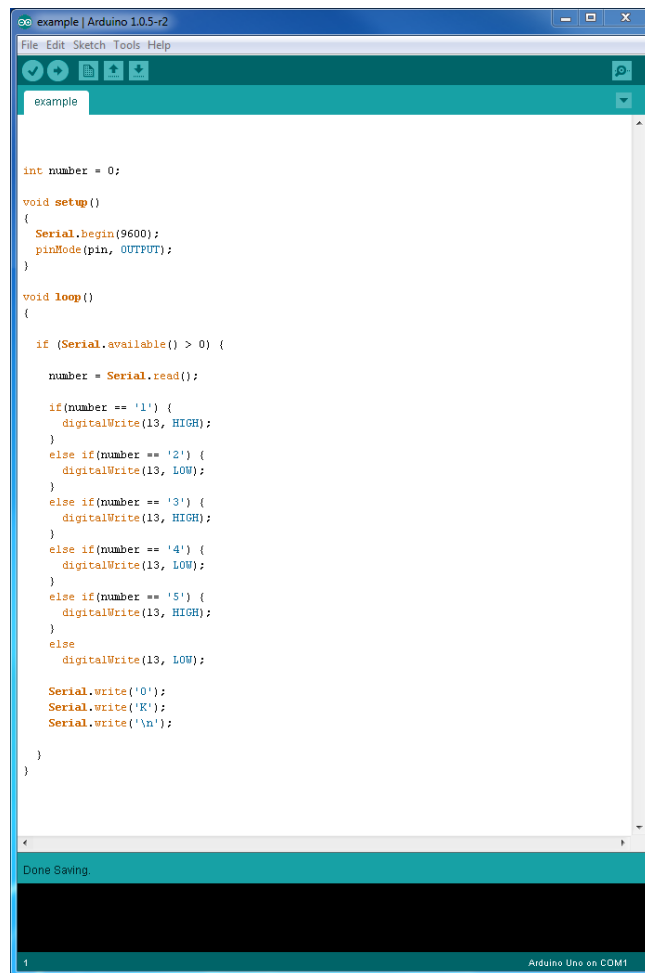
FORMULAS

The following formulas and information are meant to go with the online lesson found here:
<http://www.pyroelectro.com/edu/microcontrollers/introduction/>

EXAMPLE ARDUINO PROGRAM

The programs that we will write in this course will all be written inside of the Arduino IDE (Integrated Development Environment). This Software is freely available for download At Arduino.cc and we'll see how to get It in Lesson 2.

To the right is an example program that gives you an idea of what type of syntax and program flow a typical short and sweet Arduino program has.



```
example | Arduino 1.05-r2
File Edit Sketch Tools Help
example
int number = 0;
void setup()
{
  Serial.begin(9600);
  pinMode(pin, OUTPUT);
}
void loop()
{
  if (Serial.available() > 0) {
    number = Serial.read();
    if(number == '1') {
      digitalWrite(13, HIGH);
    }
    else if(number == '2') {
      digitalWrite(13, LOW);
    }
    else if(number == '3') {
      digitalWrite(13, HIGH);
    }
    else if(number == '4') {
      digitalWrite(13, LOW);
    }
    else if(number == '5') {
      digitalWrite(13, HIGH);
    }
    else
      digitalWrite(13, LOW);
    Serial.write('0');
    Serial.write('K');
    Serial.write('\n');
  }
}
```

Done Saving

1 Arduino Uno on COM1

ADDITIONAL INFORMATION

If you have any questions about the formulas or information found in this document, please feel free to head on over to the forums and ask us some questions!

<http://www.pyroelectro.com/forums/viewforum.php?f=25>