



**GP session**

**CS**

**IT**

**GP2016 - Arduino  
Sessions - Motor shield  
2 serial bridge**

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**By:**

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```

#include <SoftwareSerial.h>
SoftwareSerial mySerial(2, 3);
char line[100];
int n=0;
#define E1 = 10;
#define AA1 = 11;
int motor=0;
void setup()
{
    // set the data rate for the SoftwareSerial port
    pinMode(E1, OUTPUT);
    mySerial.begin(9600);
    mySerial.println("Welcome to Motor speed control");
    mySerial.print("speed [0-255]>");
}

void loop() // run over and over
{
    boolean ret;
    if(readSerial2())
    {
        mySerial.print("\n\rspeed [0-255]>");
        strcpy(line, "");
        n=0;
    }

    //readSerial2();
    //mySerial.print("cmd>");
}

boolean readSerial2()
{
    boolean recieved=false;
    char cmd[100];
    int i=0;
    int value;

```

```
if (mySerial.available() > 0)
{
  while(true)
  {
    if(mySerial.available() > 0)
    {
      cmd[i]=mySerial.read();
      mySerial.write(cmd[i]);
      if(cmd[i]=='\n' || cmd[i]=='\r')
        break;
      i++;
    }
  }
  cmd[i]='\0';
  value=atoi(cmd);
  digitalWrite(E1,HIGH);
  analogWrite(AA1, value);
  recieved=true;
}
return recieved;
}
```

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**Thanks,..**  
**See you next week (ISA),...**