**Analog Output: Pin 11 Analog Output: Pin 9**

**5V**



**Photoresistor**

**Analog Input: Pin A0**

|  |  |  |
| --- | --- | --- |
| Voltage Divider | Green LED | Red LED |
| I = 200mA (0.02A)  V = 5V  R = V/I  R = 5V/0.02A= 25Ω  \*R1 + R2 >= 25Ω | V = 5 - 1.8 = 3.2v  V(V)= I(A)x R (Ω)  3.2 = 0.02 x R (Ω)  R = 3.2/0.02 = 160 Ω | V = 5 - 1.8 = 3.2v  V(V)= I(A)x R (Ω)  3.2 = 0.02 x R (Ω)  R = 3.2/0.02 = 160Ω |
| Used: 2kΩ resistor | Used: 1kΩ resistor | Used: 1kΩ resistor |