

SOFTWARE GROUP PROJECT -IV(IT 322) AUTO INTENSITY CONTROL OF STREET LIGHTS

```
// Print to serial
LDRRatio = (float)255/(LDRMax-LDRMin);

// Calculate the ratio (note the use of float - since the
calculation is being done on integers you have to
Serial.print("LDRRatio: "); // Print to serial
Serial.println(LDRRatio);
}
void loop() {
  //Read the LDR

  LDRValue = analogRead(LDRPin) - LDRMin;
  // Print the value to the monitor so I can see it
  Serial.println(LDRValue);
  // Modify reading to match analogWrite range using Ration
  calculation

  LDRValue = (LDRValue
  ) * LDRRatio;
  // Sometimes the number is over 255 or under 0 - rounding errors
  !!!!!
  if (LDRValue < 0){
    LDRValue = 0;
  }
  if (LDRValue > 255)
  {
    LDRValue = 255;
  }
  // Print to Monitor
  Serial.print("LDRValue after calculation: ");
  Serial.println(LDRValue);
  // Set the value for the LED
  analogWrite(ledPin, LDRValue);
  delay(100);
}
```