```
// Tinkercad Arduino : Automatic Room
Lightning System
int LightSensorVal = 0; //Input Sensor
int PIRSensorVal = 0; //Input S
int RelayOutputVal = 0; //Output Relay
void setup()
{
  pinMode(A0, INPUT); // Read the LDR
sensor Value digital Input
  pinMode(2, INPUT); // Read the PIR
motion sensor value digital Input
 pinMode(8, OUTPUT); // Write the Relay
output value, digital output
 Serial.begin(9600);
}
void loop()
{
 LightSensorVal = analogRead(A0);
 PIRSensorVal = digitalRead(2);
 RelayOutputVal = 8;
 if (LightSensorVal < 600) {
  if (PIRSensorVal == HIGH) {
   digitalWrite(8, HIGH);
        delay(5000); // Wait for 5000
millisecond(s)
  } else {
   digitalWrite(8, LOW);
        delay(1000); // Wait for 1000
millisecond(s)
  }
 } else {
  digitalWrite(8, LOW);
  Serial.println(LightSensorVal);
  delay(300); // Wait for 300 millisecond(s)
 }
}
```