int swtch=A5;

int threshold=200;

int photo=A0;

int blue=13;

int green=12;

int red=11;

int val=0;

int motor=9;

int motorcontrol=135;

void setup(){

pinMode(motor,OUTPUT);

pinMode(blue,OUTPUT);

pinMode(green,OUTPUT);

pinMode(red,OUTPUT);

}

void loop(){

 val=analogRead(photo); //checking light conditions//

 int swtchstate=analogRead(swtch); //check switch//

 if(val<threshold && swtchstate>500){

 analogWrite(motor,motorcontrol); //turns motor on if light conditions are low// //sets motor speed based on potentiometer//

 digitalWrite(blue,HIGH); //If switch is on turn on white light//

 digitalWrite(green,HIGH);

 digitalWrite(red,HIGH);

 ;}

 else if(val<threshold && swtchstate<500){ //if switch is turned offand light conditions are low led will alternate color//

 analogWrite(motor,motorcontrol); //turns motor on if light conditions are low// //sets motor speed based on potentiometer//

 digitalWrite(blue,LOW);

 digitalWrite(green,LOW);

 digitalWrite(red,LOW);

 delay(5);

 digitalWrite(blue,HIGH); //blue//

 delay(1000);

 digitalWrite(blue , LOW); //green//

 digitalWrite(green,HIGH);

 delay(1000);

 digitalWrite(green,LOW); //red//

 digitalWrite(red,HIGH);

 delay(1000);

 digitalWrite(red,LOW); //teal//

 digitalWrite(blue,HIGH);

 digitalWrite(green,HIGH);

 delay(1000);

 digitalWrite(blue,LOW);//yellow//

 digitalWrite(red,HIGH);

 delay(1000);

 digitalWrite(green,LOW);

 digitalWrite(blue,HIGH); //purple//

 delay(1000); }

 else{ digitalWrite(blue,LOW);

 digitalWrite(green,LOW);

 digitalWrite(red,LOW);

 analogWrite(motor,0);

 ;}}