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);

;}}