int lightPin = 0; //Photoresistor Pin  
  
void setup() { //set outputs and inputs  
pinMode(12, OUTPUT); //a  
pinMode(11, OUTPUT); //b  
pinMode(10, OUTPUT); //c  
pinMode(9, OUTPUT); //p  
pinMode(8, OUTPUT); //f  
pinMode(7, OUTPUT); //g  
pinMode(6, OUTPUT); //e  
pinMode(5, OUTPUT); //d  
 Serial.begin(9600); // Monitor  
}  
  
void loop() {  
   
 int lightLevel = analogRead(lightPin); //Read the lightlevel  
 lightLevel = map(lightLevel, 410, 640, 0, 9);  
 Serial.println(lightLevel);  
 int l = lightLevel;  
 if(l==0){zero();}  
 if(l==1){one();}  
 if(l==2){two();}  
 if(l==3){three();}  
 if(l==4){four();}  
 if(l==5){five();}  
 if(l==6){six();}  
 if(l==7){seven();}  
 if(l==8){eight();}  
 if(l==9){nine();}  
}  
void one(){  
 digitalWrite(11, HIGH);   
 digitalWrite(10, HIGH);   
 delay(250);  
 digitalWrite(11, LOW);   
 digitalWrite(10, LOW);   
}  
  
void two(){  
 digitalWrite(12, HIGH);   
 digitalWrite(11, HIGH);   
 digitalWrite(7, HIGH);   
 digitalWrite(6, HIGH);   
 digitalWrite(5, HIGH);   
 delay(250);  
 digitalWrite(12, LOW);   
 digitalWrite(11, LOW);   
 digitalWrite(7, LOW);   
 digitalWrite(6, LOW);   
 digitalWrite(5, LOW);   
}  
void three(){  
 digitalWrite(12, HIGH);   
 digitalWrite(11, HIGH);   
 digitalWrite(10, HIGH);   
 digitalWrite(7, HIGH);   
 digitalWrite(5, HIGH);   
 delay(250);  
 digitalWrite(12, LOW);   
 digitalWrite(11, LOW);   
 digitalWrite(10, LOW);   
 digitalWrite(7, LOW);   
 digitalWrite(5, LOW);   
}  
void four(){  
 digitalWrite(11, HIGH);   
 digitalWrite(10, HIGH);  
 digitalWrite(8, HIGH);   
 digitalWrite(7, HIGH);   
 delay(250);  
 digitalWrite(11, LOW);   
 digitalWrite(10, LOW);   
 digitalWrite(8, LOW);  
 digitalWrite(7, LOW);   
}  
void five(){  
 digitalWrite(12, HIGH);   
 digitalWrite(10, HIGH);  
 digitalWrite(8, HIGH);   
 digitalWrite(7, HIGH);   
 digitalWrite(5, HIGH);   
 delay(250);  
 digitalWrite(12, LOW);   
 digitalWrite(10, LOW);   
 digitalWrite(8, LOW);  
 digitalWrite(7, LOW);   
 digitalWrite(5, LOW);   
}  
void six(){  
 digitalWrite(12, HIGH);   
 digitalWrite(10, HIGH);  
 digitalWrite(8, HIGH);   
 digitalWrite(7, HIGH);   
 digitalWrite(6, HIGH);   
 digitalWrite(5, HIGH);   
 delay(250);  
 digitalWrite(12, LOW);   
 digitalWrite(10, LOW);   
 digitalWrite(8, LOW);  
 digitalWrite(7, LOW);   
 digitalWrite(6, LOW);   
 digitalWrite(5, LOW);   
}  
void seven(){  
 digitalWrite(12, HIGH);   
 digitalWrite(11, HIGH);   
 digitalWrite(10, HIGH);  
 delay(250);  
 digitalWrite(12, LOW);   
 digitalWrite(11, LOW);   
 digitalWrite(10, LOW);   
  
   
}  
void eight(){  
 digitalWrite(12, HIGH);   
 digitalWrite(11, HIGH);   
 digitalWrite(10, HIGH);  
 digitalWrite(8, HIGH);   
 digitalWrite(7, HIGH);   
 digitalWrite(6, HIGH);   
 digitalWrite(5, HIGH);   
 delay(250);  
 digitalWrite(12, LOW);   
 digitalWrite(11, LOW);   
 digitalWrite(10, LOW);   
 digitalWrite(8, LOW);  
 digitalWrite(7, LOW);   
 digitalWrite(6, LOW);   
 digitalWrite(5, LOW);   
}  
void nine(){  
 digitalWrite(12, HIGH);   
 digitalWrite(11, HIGH);   
 digitalWrite(10, HIGH);  
 digitalWrite(8, HIGH);   
 digitalWrite(7, HIGH);   
 digitalWrite(5, HIGH);   
 delay(250);  
 digitalWrite(12, LOW);   
 digitalWrite(11, LOW);   
 digitalWrite(10, LOW);   
 digitalWrite(8, LOW);  
 digitalWrite(7, LOW);   
 digitalWrite(5, LOW);   
}  
void zero(){  
 digitalWrite(12, HIGH);   
 digitalWrite(11, HIGH);   
 digitalWrite(10, HIGH);  
 digitalWrite(8, HIGH);   
 digitalWrite(6, HIGH);   
 digitalWrite(5, HIGH);   
 delay(250);  
 digitalWrite(12, LOW);   
 digitalWrite(11, LOW);   
 digitalWrite(10, LOW);   
 digitalWrite(8, LOW);  
 digitalWrite(6, LOW);   
 digitalWrite(5, LOW);   
}