Arduino Code for Project 3- Eversion

const int PinInterruptor=8;//Initialising the constant variable for the tilt switch

unsigned long PreviousTime=0;//Using the unsigned long variable as expleined before

int InterruptorState=0;//Initialtating variables

int PreviousStateInterruptor=0;

int Led=2;//Variable used to count which LED will be the next on lighting

long TimeIntervalocadaLed=600000;//Every 5 secons a LED will light

int c=0;

void setup() {

 for(int x=2;x<8;x++){

 pinMode(x,OUTPUT); //Stablishing all the LEDs as outputs

 }

 pinMode(PinInterruptor,INPUT); //Stablishing the switch as an input

}

void loop() {

 unsigned long ActualTime=millis();//Knowing how long the program has been working

 if(ActualTime-PreviousTime>TimeIntervalocadaLed){ //Veryfing if has transcurred the required time to switvh on another LED

 PreviousTime=ActualTime;

 digitalWrite(Led,HIGH);//Lighting a new LED

 Led++;//Preparing to light the next one

 if(Led==7){ //In case that there is just one LED switch off advise by blinking all LEDs when the time is about to finish(2.5 seconds before)

 delay(2500);

 c=0;

 while(c<5){

 for(int x=2;x<8;x++){

 digitalWrite(x,LOW);

 }

 delay(500);

 for(int x=2;x<8;x++){

 digitalWrite(x,HIGH);

 }

 delay(500);

 c++;

 }

 }

 }

 InterruptorState=digitalRead(PinInterruptor); //Read sensor state

 if(InterruptorState !=PreviousStateInterruptor){ //Puting all variables at zero if the state has changed

 for(int x=2;x<8;x++){

 digitalWrite(x,LOW);

 }

 Led=2;

 PreviousTime=ActualTime;

 }

 PreviousStateInterruptor=InterruptorState; //Stablishing the actual state as the previous one