**Smart home 1**

in t t= 2 ; in t e= 3 ;

void setup()

{

Serial.b egin ( 9 6 0 0 ) ;

p in Mo de( t,OUTPUT) ;

p in Mo de( e,INPUT);

p in Mo de( 1 2 ,OUTPUT) ;

}

void lo o p ( )

{

//ultra so n ic sensor

digita lWrite( t,LOW) ;

digita lWrite( t,HIGH);

dela yMicro seco n ds( 1 0 ) ; digita lWrite( t,LOW) ;

float dur= p ulseIn ( e,HIGH) ; float dis= ( dur\*0 .0 3 4 3 )/2 ; Seria l.p rin t( "Dista n ce is: ") ; Serial.p rin tln ( dis) ;

//LED ON

if( dis> = 1 0 0 )

{

digita lWrite( 8 ,HIGH); digita lWrite( 7 ,HIGH); }

//B uzzer For ultrasonic Sensor if( dis> = 1 0 0 )

{

fo r( in t i= 0 ; i< = 3 0 0 0 0 ; i= i+1 0 )

{

to n e( 1 2 ,i) ;

dela y( 1 0 0 0 ) ;

n o To n e( 1 2 ) ;

dela y( 1 0 0 0 ) ;

}
  
}

//Temp era te Sensor

double a = a n a lo gRea d(A 0 ) ; double t= ( ( ( a /1 0 2 4 ) \*5 ) -0 .5 ) \*1 0 0 ; Seria l.p rin t( "Temp Value: ") ; Serial.p rin tln ( t) ;

dela y( 1 0 0 0 ) ;

//LED ON

if( t> = 1 0 0 )

{

digita lWrite( 8 ,HIGH); digita lWrite( 7 ,HIGH); }

//B uzzer for Temperature Sensor if( t> = 1 0 0 )

{

fo r( in t i= 0 ; i< = 3 0 0 0 0 ; i= i+1 0 )

{

to n e( 1 2 ,i) ;

dela y( 1 0 0 0 ) ;

n o To n e( 1 2 ) ;

dela y( 1 0 0 0 ) ;

}
  
}

//LED OFF

if( t< 1 0 0 )

{

digita lWrite( 8 ,LOW) ;
  
digita lWrite( 7 ,LOW) ;

}

}