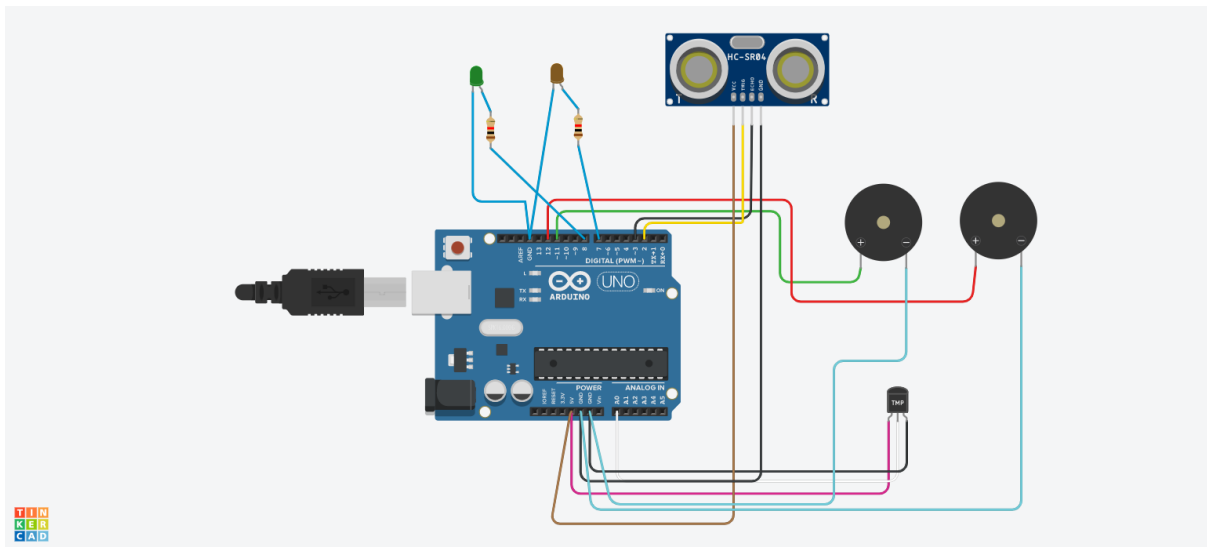ASSIGNMENT – 1 - PRATEEK RAM RA

CODE

```
int t=2;

       int e=3;


       void setup()

       {

         Serial.begin(9600);

         pinMode(t,OUTPUT);

         pinMode(e,INPUT);

         pinMode(12,OUTPUT);

       }


       void loop()

       {

         //ultrasonic sensor

         digitalWrite(t,LOW);

         digitalWrite(t,HIGH);

         delayMicroseconds(10);

         digitalWrite(t,LOW);
```

```
float dur=pulseIn(e,HIGH);

float dis=(dur*0.0343)/2;

Serial.print("Distance is: ");

Serial.println(dis);


 //LED ON

if(dis>=100)

{

  digitalWrite(8,HIGH);

  digitalWrite(7,HIGH);

}


//Buzzer For ultrasonic Sensor

if(dis>=100)

{

for(int i=0; i<=30000; i=i+10)

{

tone(12,i);

delay(1000);

noTone(12);

delay(1000);

}

}




 //Temperate Sensor

double a= analogRead(A0);

double t=(((a/1024)*5)-0.5)*100;

Serial.print("Temp Value: ");
```

```
  Serial.println(t);

  delay(1000);


  //LED ON

  if(t>=100)

  {

    digitalWrite(8,HIGH);

    digitalWrite(7,HIGH);

  }


  //Buzzer for Temperature Sensor

  if(t>=100)

  {

  for(int i=0; i<=30000; i=i+10)

  {

  tone(12,i);

  delay(1000);

  noTone(12);

  delay(1000);

  }

  }


  //LED OFF

  if(t<100)

  {

    digitalWrite(8,LOW);

    digitalWrite(7,LOW);

  }

}
```