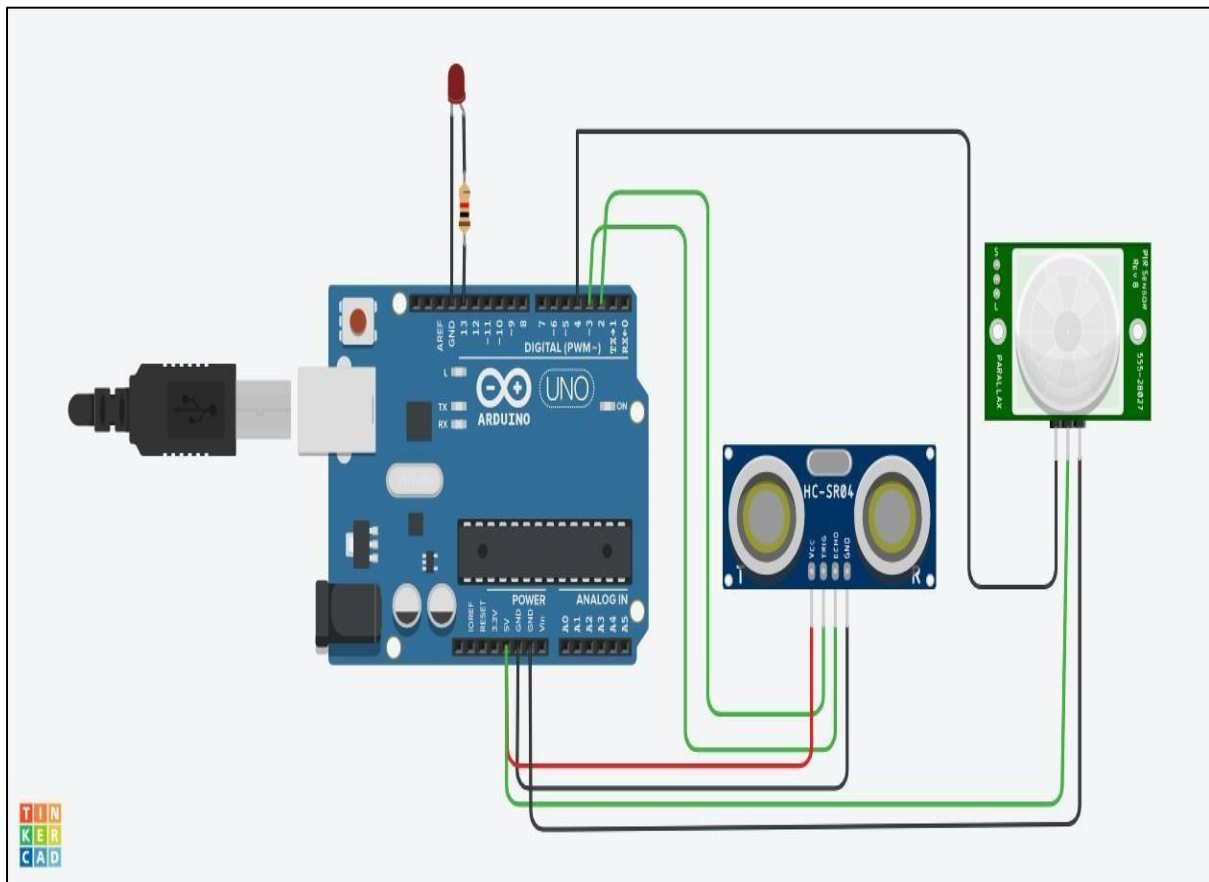


# PERSONAL ASSISTANCE FOR SENIORS WHO ARE SELF-RELIANT

## ASSIGNMENT – I

### TINKER CAD:



## CODE:

```
int trigger_pin=2;
int echo_pin=3;
int time;
int distance;
void setup()
{
  Serial.begin(9600);

  pinMode(trigger_pin,OUTPUT);

  pinMode(echo_pin,INPUT);
  pinMode(4,INPUT);
  pinMode(13,OUTPUT);
}
void loop()
{
  digitalWrite(trigger_pin,HIGH);
  delayMicroseconds(10);
  digitalWrite(trigger_pin,LOW);
  time=pulseIn(echo_pin,HIGH);
  distance=(time*0.034)/2;
  if(distance<=10)
  {
    Serial.println("Door open");
    Serial.print("Distance=");
    Serial.println(distance);
    delay(500);
  }
  else{
    Serial.println("Door closed");
    Serial.print("Distance=");
    Serial.println(distance);
    delay(500);
```

```
int p=digitalRead(4);if(p)
{
    digitalWrite(13,HIGH);
    Serial.println("motion detected");
}
else
{
    digitalWrite(13,LOW);
    Serial.println("not detected");
}
}
```