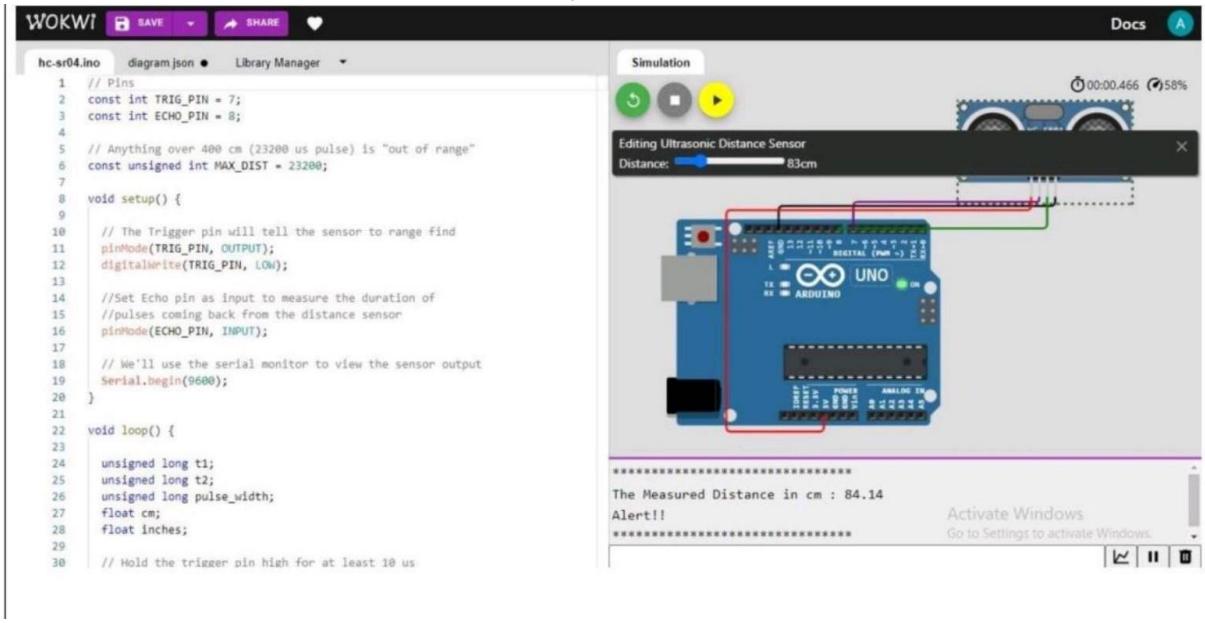
```
 const int TRIG_PIN = 7 ;
 const int ECHO_PIN = 8;

 const unsigned int
 MAX_DIST = 23200;

 void setup() {
 Mode(TRIG_PIN, OUTPUT);
 digital Write(TRIG_PIN, LOW);

pinMode(ECHO_PIN, INPUT ) ;

Serial.begin(9600);
 }

 void loop() {
 unsigned long t1;

 unsigned long t2;

  unsigned long pulse_width;
  float cm;
  float inches;

 digitalWrite(TRIG_PIN, HIGH);
 delayMicroseconds(10);
 digitalWrite(TRIG_PIN, LOW);

while (digitalRead( ECHO_PIN )==0 );

  t1= micros ();
   while (digitalRead(ECHO_PIN) == 1);
    t2= micros ();
    pulse_width = t2-t1;

  cm=pulse_Width / 58 ;
  inches = pulse_width/148.0;
```

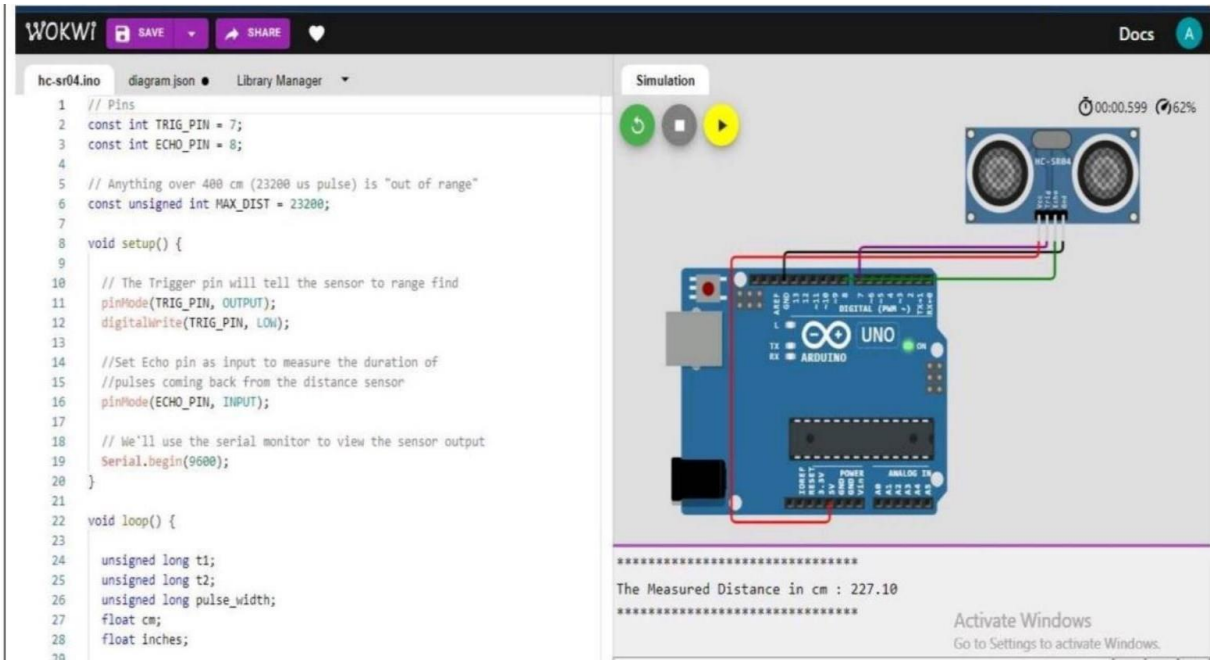
```
 if (pulse_width >MAX _ DIST ){
 Serial.println("Out of range");
 } else {
 Serial.println("**************************”);
 Serial.print("The Measured Distance in cm: ");
 Serial.println(cm);

if( cm < 100 ){

      while(true){

       Serial.println(“Alert!!”);

       }

 }

 Serial.print(“**********************************”);

 }

 Delay(1000);
 }
```

Output:

1. If the distance is less than 100 cms ,it alerts.



2. If the distance is more than 100 cms,it won't alert



3. Simulation and code execution