CODE:

```
int trigger_pin = 2;

int echo_pin = 3;

int buzzer_pin = 10;

int time;

int distance;

void setup()

{

    Serial.begin (9600);

    pinMode (trigger_pin, OUTPUT);

    pinMode (echo_pin, INPUT);

    pinMode (buzzer_pin, 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);

    digitalWrite (buzzer_pin, HIGH);
```
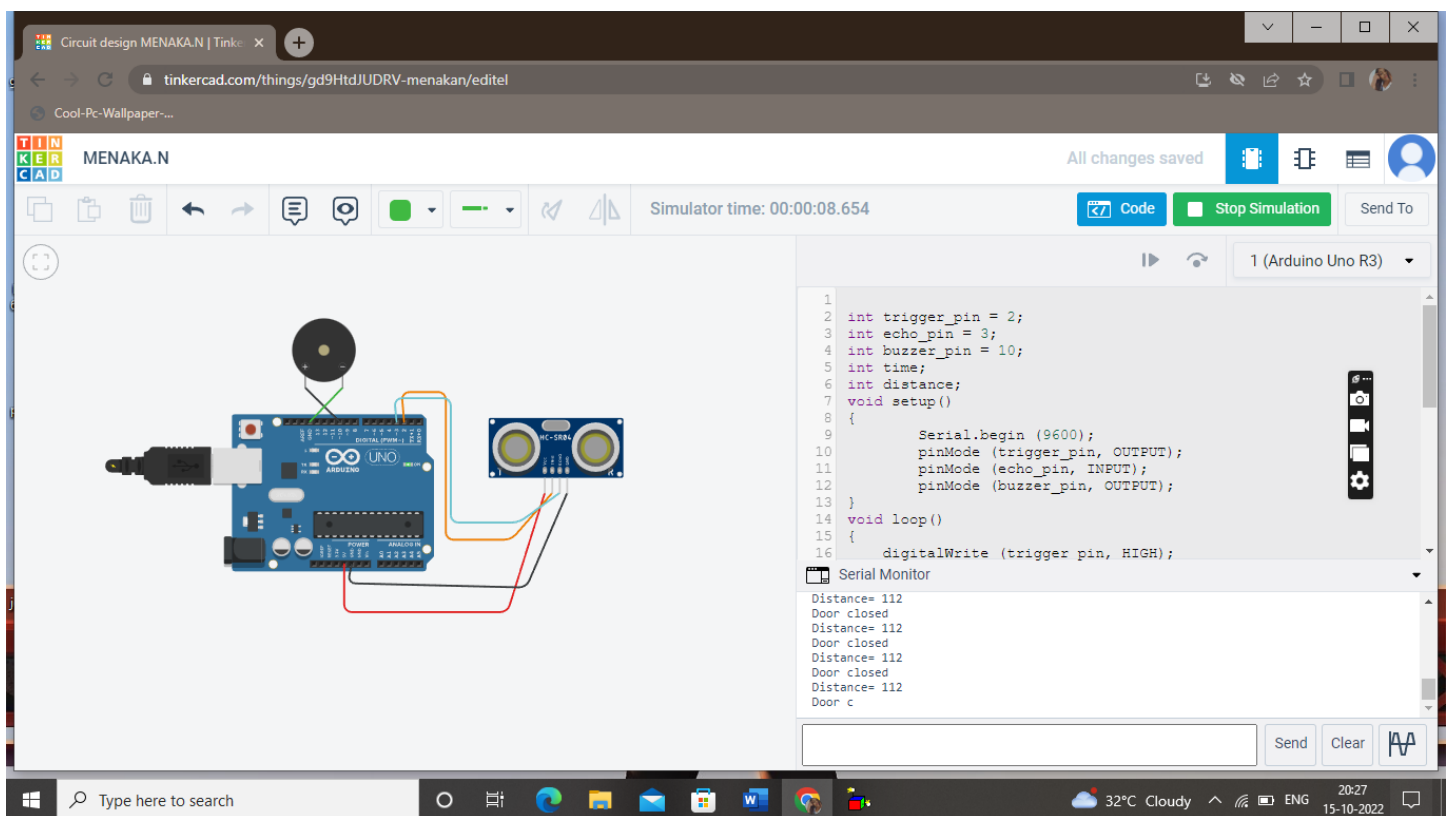
```
        delay (500);

        }

    else {

        Serial.println (" Door closed ");

        Serial.print (" Distance= ");

        Serial.println (distance);

        digitalWrite (buzzer pin, LOW);

        delay (500);

        }

    }
```

OUTPUT: