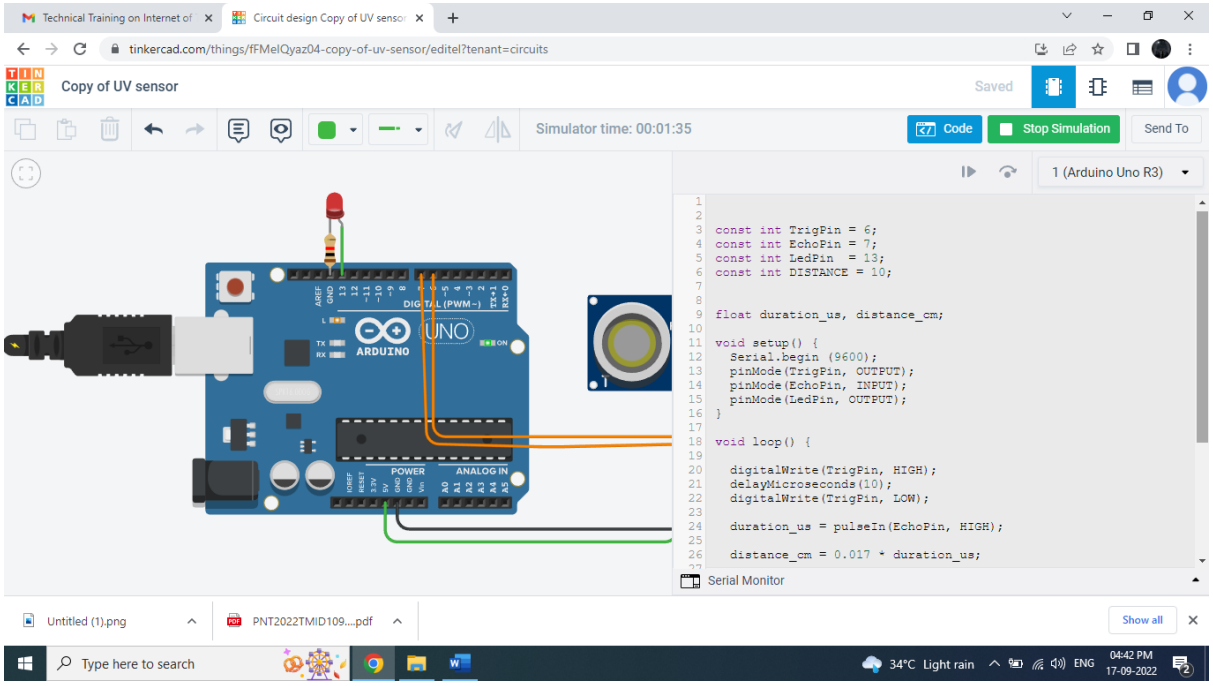


```
const int TrigPin = 6;
const int EchoPin = 7;
const int LedPin  = 13;
const int DISTANCE = 10;


float duration_us, distance_cm;

void setup() {
  Serial.begin (9600);
  pinMode(TrigPin, OUTPUT);
  pinMode(EchoPin, INPUT);
  pinMode(LedPin, OUTPUT);
}
```

```
void loop() {

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

  duration_us = pulseIn(EchoPin, HIGH);

  distance_cm = 0.017 * duration_us;

  if(distance_cm < DISTANCE)
    digitalWrite(LedPin, HIGH);
  else
    digitalWrite(LedPin, LOW);


  Serial.print("distance: ");
  Serial.print(distance_cm);
  Serial.println(" cm");

  delay(500);
}
```