**PROJECT TITLE: AIR QUALITY MONITORING**

**NAME :** ASWIN B

**REG NO** : 953021106010

**COLLEGE CODE :** 9530

**COLLEGE NAME :** ST.MOTHER THERESA ENGINEERING COLLEGE

**TEAM CODE : proj\_201035\_Team\_2**

PROGRAM**:**

import java.util.Random;

class AirQualitySensor {

public double readPM25() {

return new Random().nextDouble() \* 50 + 1;

}

public double readPM10() {

return new Random().nextDouble() \* 60 + 1;

}

public double readCO2() {

return new Random().nextDouble() \* 1000 + 300;

}

public double readTemperature() {

return new Random().nextDouble() \* 40 + 10;

}

public double readHumidity() {

return new Random().nextDouble() \* 70 + 20;

}

}

class AirQualityMonitoringSystem {

public static void main(String[] args) {

AirQualitySensor sensor = new AirQualitySensor();

for (int i = 1; i <= 5; i++) {

System.out.println("Reading sensors...");

double pm25 = sensor.readPM25();

double pm10 = sensor.readPM10();

double co2 = sensor.readCO2();

double temperature = sensor.readTemperature();

double humidity = sensor.readHumidity();

System.out.println("Air Quality Data:");

System.out.println("PM2.5 Level: " + pm25 + " g/m");

System.out.println("PM10 Level: " + pm10 + " g/m");

System.out.println("CO2 Level: " + co2 + " ppm");

System.out.println("Temperature: " + temperature + "C");

System.out.println("Humidity: " + humidity + "%");

try {

Thread.sleep(2000); // Simulate a 2-second delay between readings

} catch (InterruptedException e) {

e.printStackTrace();

}

}

}

}