```
const int trigPin = 9;
const int echoPin = 10;
const int redLED = 2;
const int yellowLED = 3;
const int greenLED = 4;

long duration;
int distance;
int tankHeight = 240; // NEW: updated tank height in cm

void setup() {
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  pinMode(redLED, OUTPUT);
  pinMode(yellowLED, OUTPUT);
  pinMode(greenLED, OUTPUT);
  Serial.begin(9600);
}

void loop() {
  // Trigger ultrasonic pulse
  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);

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

  // Measure echo time and convert to cm
  duration = pulseIn(echoPin, HIGH);
  distance = duration * 0.0343 / 2;

  // Calculate water level as a percentage of the tank height
  int levelPercent = ((tankHeight - distance) * 100) / tankHeight;
  levelPercent = constrain(levelPercent, 0, 100);  // Clamp between 0% and 100%

  // Print the calculated percentage
  Serial.print("Water Level: ");
  Serial.print(levelPercent);
  Serial.println("%");

  // LED indicators
  if (levelPercent > 75) {
    digitalWrite(greenLED, HIGH);
    digitalWrite(yellowLED, LOW);
    digitalWrite(redLED, LOW);
  }
  else if (levelPercent > 40) {
    digitalWrite(greenLED, LOW);
    digitalWrite(yellowLED, HIGH);
    digitalWrite(redLED, LOW);
  }
  else {
    digitalWrite(greenLED, LOW);
    digitalWrite(yellowLED, LOW);
```

```
    digitalWrite(redLED, HIGH);
  }

  delay(1000);
}
```