```
// C++ code
//
int set_waterlevel = 0;

int waterlevel = 0;
int moisture_data = 0;

long readUltrasonicDistance(int triggerPin, int echoPin)
{
  pinMode(triggerPin, OUTPUT);
  digitalWrite(triggerPin, LOW);
  delayMicroseconds(2);
  digitalWrite(triggerPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(triggerPin, LOW);
  pinMode(echoPin, INPUT);
  return pulseIn(echoPin, HIGH);
}

void setup()
{
   pinMode(A0, INPUT);
  Serial.begin(9600);
  pinMode(8, OUTPUT);
  pinMode(10, OUTPUT);
  pinMode(6, OUTPUT);
}

void loop()
{
  waterlevel = 0.01723 * readUltrasonicDistance(3, 2);

  Serial.print(waterlevel);
  Serial.println("WATER LEVEL");
  if (waterlevel > 200) {
    digitalWrite(8, HIGH);
    digitalWrite(10, LOW);
    digitalWrite(6, LOW);
  }
  if (waterlevel < 100) {
    digitalWrite(8, HIGH);
    digitalWrite(10, HIGH);
    digitalWrite(6, HIGH);
  }
  if (waterlevel <=200)
  {
    digitalWrite(8,HIGH);
    digitalWrite(10,LOW);
  digitalWrite(6, LOW);
```

```
  delay(10);
  }
 moisture_data = analogRead(A0);
Serial.print(moisture_data);
  Serial.println("Moisture data");
  if (moisture_data < 12) {
    digitalWrite(10, HIGH);
    digitalWrite(6, HIGH);
  } else {
    digitalWrite(10, LOW);
    digitalWrite(6, LOW);
  }
  delay(10); //
}
```