Demo for Assignment 7

Because I don't have a soil moisture sensor, so that I use a water sensor to do this exercise 7.

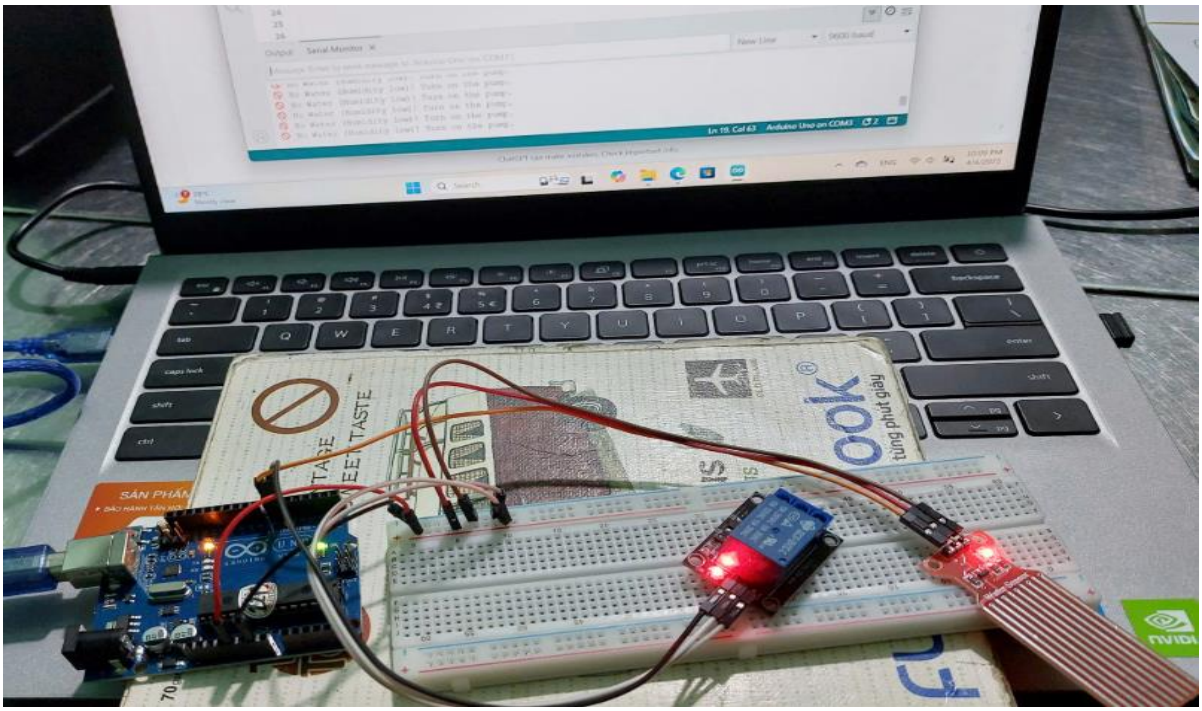
As far as I know, Water sensor is also capable of detecting humidity or water and can replace soil moisture sensor in some cases.

- First, I write code on Arduino IDE software to connect Arduino with water sensor and single 5VDC Relay circuit. Single 5VDC Relay circuit will be able to open and close water pump when water or humidity changes.

```
#define SENSOR_PIN 7
#define RELAY_PIN 6

void setup() {
  pinMode(SENSOR_PIN, INPUT);
  pinMode(RELAY_PIN, OUTPUT);
  Serial.begin(9600);
  digitalWrite(RELAY_PIN, LOW);
}

void loop() {
  int sensorValue = digitalRead(SENSOR_PIN);

  if (sensorValue == LOW) {
    digitalWrite(RELAY_PIN, HIGH);
    Serial.println("No Water (Humidity low)! Turn on the pump.");
  } else {
    digitalWrite(RELAY_PIN, LOW);
    Serial.println("Water (high humidity)! Turn of the pump.");
  }

  delay(500);
}
```

- Then, I upload the code to Arduino for it to execute.

- If there is no water or moisture then the replay will activate causing the pump to pump water.



- On the contrary, when there is water and high humidity, the relay will close, causing the pump to stop working.