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// AUTOMATIC WATERING SYSTEM
// GYMVAMOU STEMTEAM

int sensorPin = A0;
int sensorValue = 0;
int percent = 0;

void setup() {
  Serial.begin(9600);
  pinMode(5, OUTPUT);
  pinMode(6, OUTPUT);
  pinMode(10, OUTPUT);
}
int convertToPercent(int value)
{
  int percentValue = 0;
  percentValue = map(value, 1023, 465, 0, 100);
  return percentValue;
}

void printValuesToSerial()
{
  Serial.print("\n\nAnalog Value: ");
  Serial.print(sensorValue);
  Serial.print("\nPercent: ");
  Serial.print(percent);
  Serial.print("%");
}

void loop() {
  sensorValue = analogRead(sensorPin);
  percent = convertToPercent(sensorValue);
  printValuesToSerial();
  delay(1000);
  if (percent <= 20 ){
    digitalWrite(5,HIGH);
    digitalWrite(6,LOW);
    digitalWrite(10,LOW);
  }
  if (percent >= 21 ){
    digitalWrite(6,HIGH);
    digitalWrite(5,LOW);
    digitalWrite(10,HIGH);
  }
}

```