

UNIVERSITY OF SCIENCE - VNUHCM

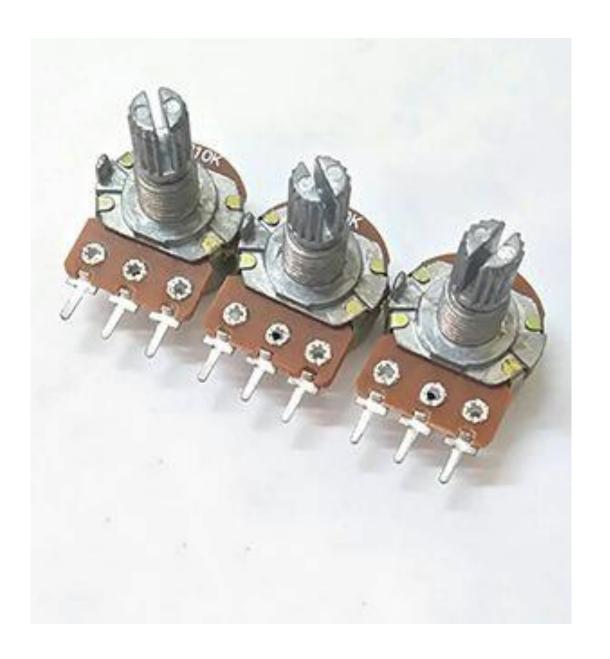
Faculty of Information Technology

INTERNET OF THINGS

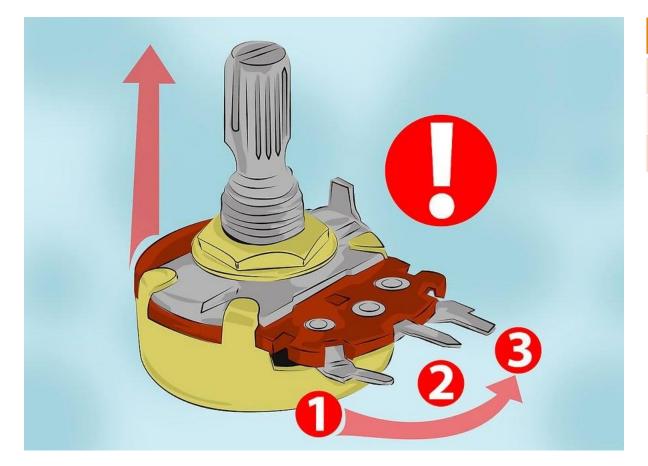
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POTENTIOMETER

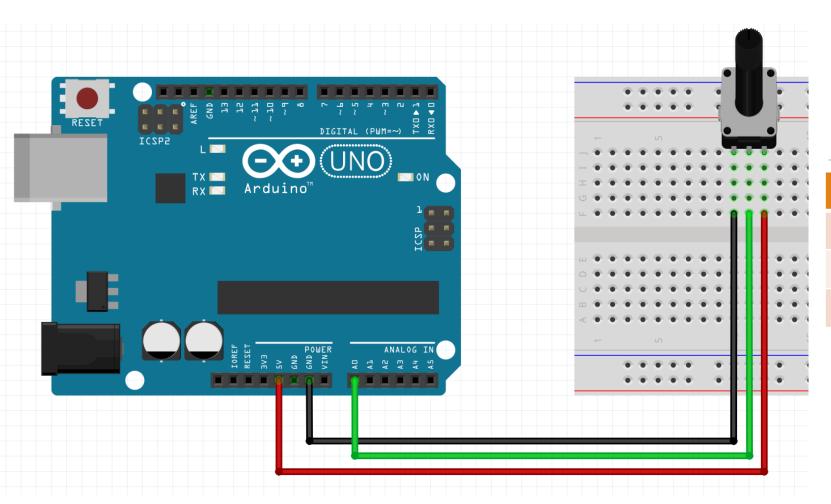




POTENTIOMETER (Biến trở)



| Potentiometer | Arduino |
|---------------|------------|
| 1 | GND |
| 2 | Analog Pin |
| 3 | 5v |



| Potentiometer | Arduino |
|---------------|---------|
| 1 | GND |
| 2 | A0 |
| 3 | 5V |

```
int potentiometer_pin = A0;
void setup() {
  pinMode(potentiometer_pin, INPUT);
  Serial.begin(9600);
void loop() {
  int value = analogRead(potentiometer_pin); //values in range 0 - 1023
  Serial.println(value);
  delay(100);
```



Change the brightness of the LED with potentiometer

int led_value = map(potentiometer_value, 0, 1023, 0, 255)

```
int potentiometer_pin = A0;
int led_pin = 6;
void setup() {
  pinMode(potentiometer_pin, INPUT);
  pinMode(led_pin, OUTPUT);
  Serial.begin(9600);
void loop() {
  int value = analogRead(potentiometer_pin); //values in range 0 - 1023
  int led_value = map(value, 0, 1023, 0, 255);
  analogWrite(led_pin, led_value);
  delay(100);
```