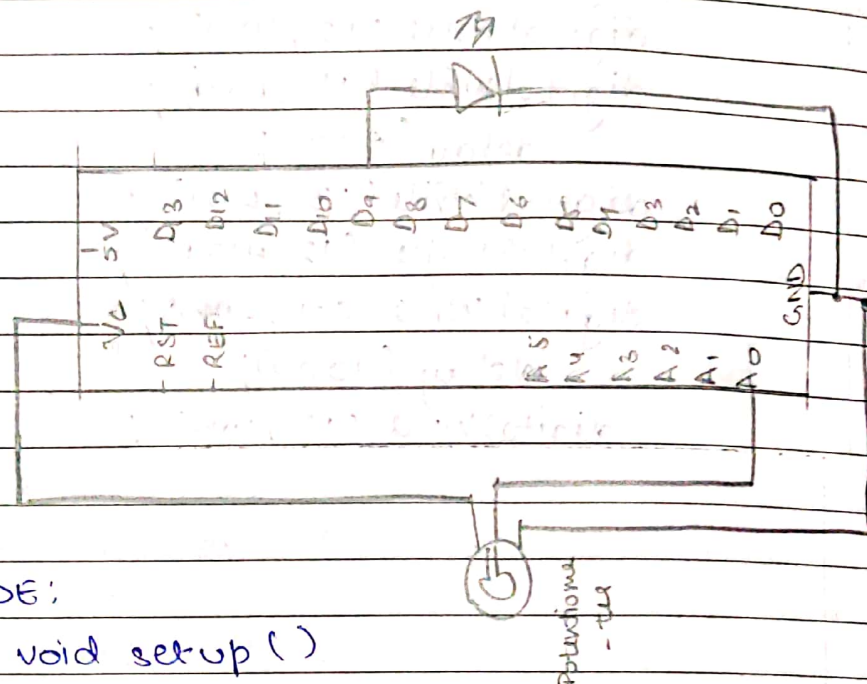PROGRAM NO : 3

PROGRAM TITLE : ~~FADING~~ FADING LED Using Potentiometer

AIM : Demonstrate to show LED fading (Analog Output)

HARDWARE REQUIREMENTS : Arduino Board, LED, connecting wire, Resistor

CIRCUIT DIAGRAM:

CODE:

```
void setup()
{
    Serial.begin(9600);
    pinMode(9, OUTPUT);
}
void loop()
{
    int analog = analogRead(A0);
    int brightness = map(analog, 0, 1023, 0, 255);
    analogWrite(9, brightness);
    Serial.print("\n Analog value");
    Serial.print(analog);
    Serial.print("\n Brightness value");
    Serial.print(brightness);
}
```

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