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IBM CS138

classmate

Date

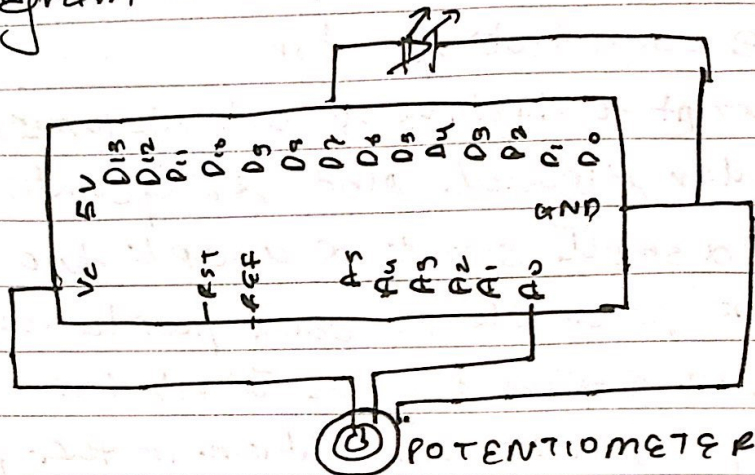
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Program: 3 - FADING LED USING POTENTIOMETER

Aim: Demonstrate a fading LED (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 values: ");
```

```
  Serial.print(analog);
```

```
  Serial.print("\n Brightness value ");
```

```
  Serial.print(brightness); }
```