

Program: 6

Program Title: Night-light Simulator

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Aim: Demonstrate to show ON/OFF of a LED using LDR-Night light simulation.

Hardware Required:

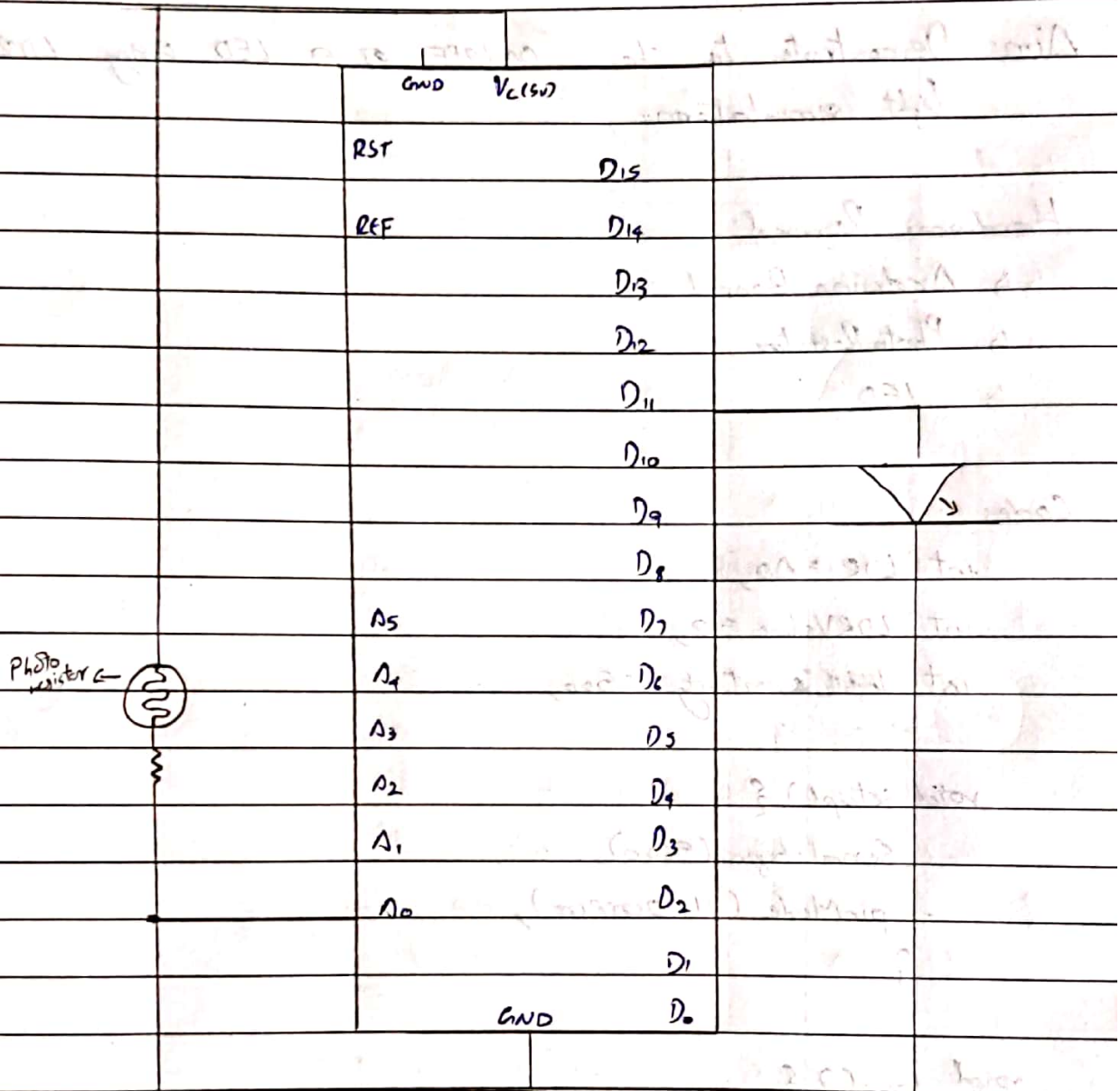
- ↳ Arduino Board
- ↳ Photo Resistor
- ↳ LED

Code:

```
int LDR = A0;
int LDRValue = 0;
int light_sensitivity = 500;
```

```
void setup() {
  Serial.begin(9600);
  pinMode(11, OUTPUT);
}
```

```
void loop() {
  LDRValue = analogRead(LDR);
  Serial.println(LDRValue);
  delay(50);
  if (LDRValue < light_sensitivity)
  {
    digitalWrite(11, HIGH);
  }
  else
  {
    digitalWrite(11, LOW);
  }
  delay(1000);
}
```

Circuit Diagram

②