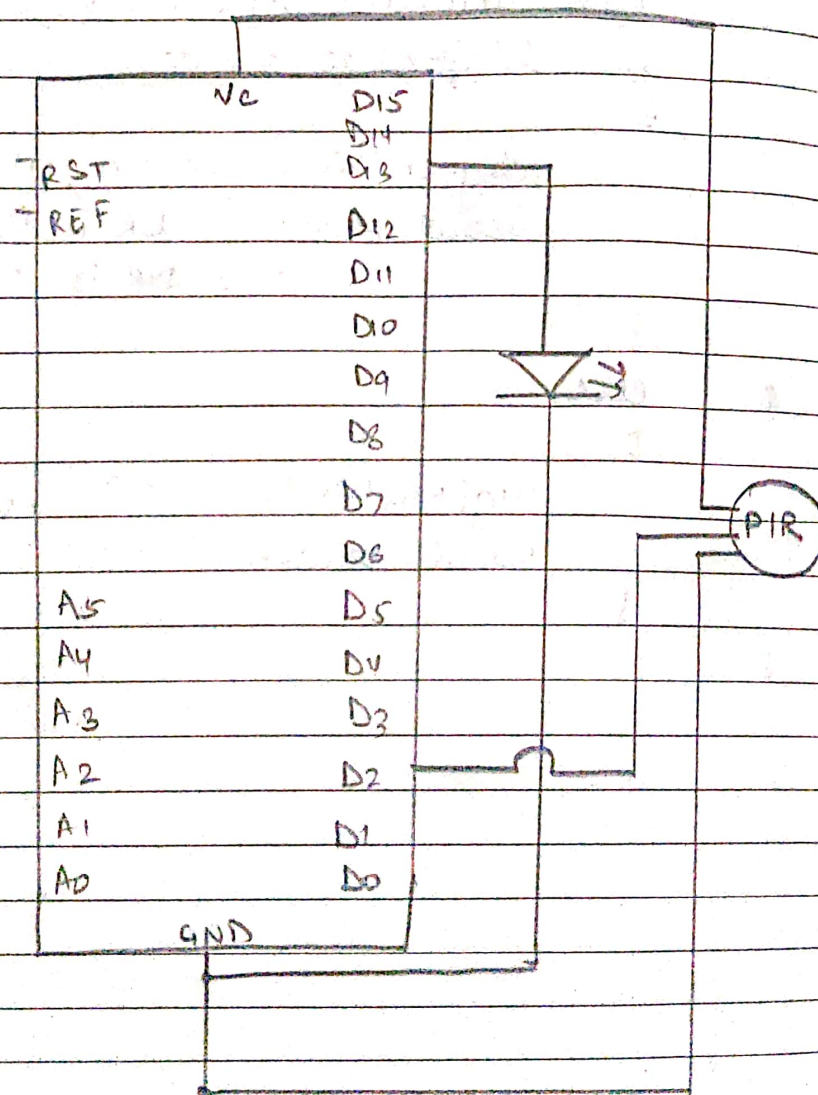PROGRAM NO. : 7

PROGRAM TITLE : PIR sensor

AIM: Demonstrade to show the working of PIR sensor

HARDWARE REQUIREMENTS: Arduino Board, LED, Resistor, Bread Board, connecting wires, PIR sensor

CIRCUIT DIAGRAM:

CODE :

```
int led = 13;
int sensor = 6;
int state = LOW;
int val = 0;
void set-up ()
{
        pinMode ( led , OUTPUT);
        pinMode (sensor, INPUT);
        Serial. begin (9600);
}

void loop ()
{
        val = digitalRead (sensor);
        if (val = = HIGH)
        {
                digitalWrite ( led, HIGH);
                delay (10);
                if (state == LOW)
                {
                        Serial. printen ("Motion detected!");
                        state = HIGH;
                }
        }
        else
        {
                digitalWrite ( led, LOW);
                delay (10);
                if (state = =HIGH),
                {
                        Serial. printen ("Motion stopped!");
                        state = LOW;
                }
        }
}
```