EXPERIMENT NO: 6

Roll No: *Class: BE*   *Division: A*   *Date: /   / 2024*

TITLE: Interfacing IR sensor with Arduino board and program to turn on buzzer when obstacle detected.

AIM: Interfacing of IR sensor with Arduino to control device.

Task: Write a program to Interface IR sensor with Arduino board and program to turn on buzzer when obstacle detected.

Source Code:

```
# define IR_Sensor 9
# define Buzzer 2

void setup() {
  Serial.begin(9600);
  pinMode(IR_Sensor, INPUT);
  pinMode(Buzzer, OUTPUT);
  Serial.print("IR Sensor and Buzzer Interfacing");
}

void loop() {
  int a;
  a = digitalRead(IR_Sensor);
  if(a==0){
    Serial.println("Object Detected");
    Serial.println("Buzzer ON");
    digitalWrite(Buzzer, LOW);
    delay(1000);
  }
  else{
    Serial.println("Object Not Detected");
    Serial.println("Buzzer OFF");
    digitalWrite(Buzzer, HIGH);
    delay(1000);
  }
}
```

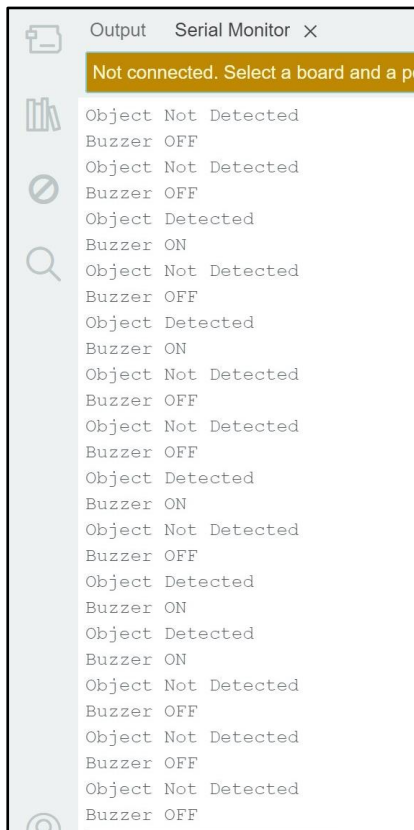# EXPERIMENT NO: 6

Output:

```
Output    Serial Monitor  X
Not connected. Select a board and a p
Object Not Detected
Buzzer OFF
Object Not Detected
Buzzer OFF
Object Detected
Buzzer ON
Object Not Detected
Buzzer OFF
Object Detected
Buzzer ON
Object Not Detected
Buzzer OFF
Object Not Detected
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Object Detected
Buzzer ON
Object Not Detected
Buzzer OFF
Object Detected
Buzzer ON
Object Detected
Buzzer ON
Object Not Detected
Buzzer OFF
Object Not Detected
Buzzer OFF
Object Not Detected
Buzzer OFF
```

Fig 1 Serial Monitor Output

Observations:

_____
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