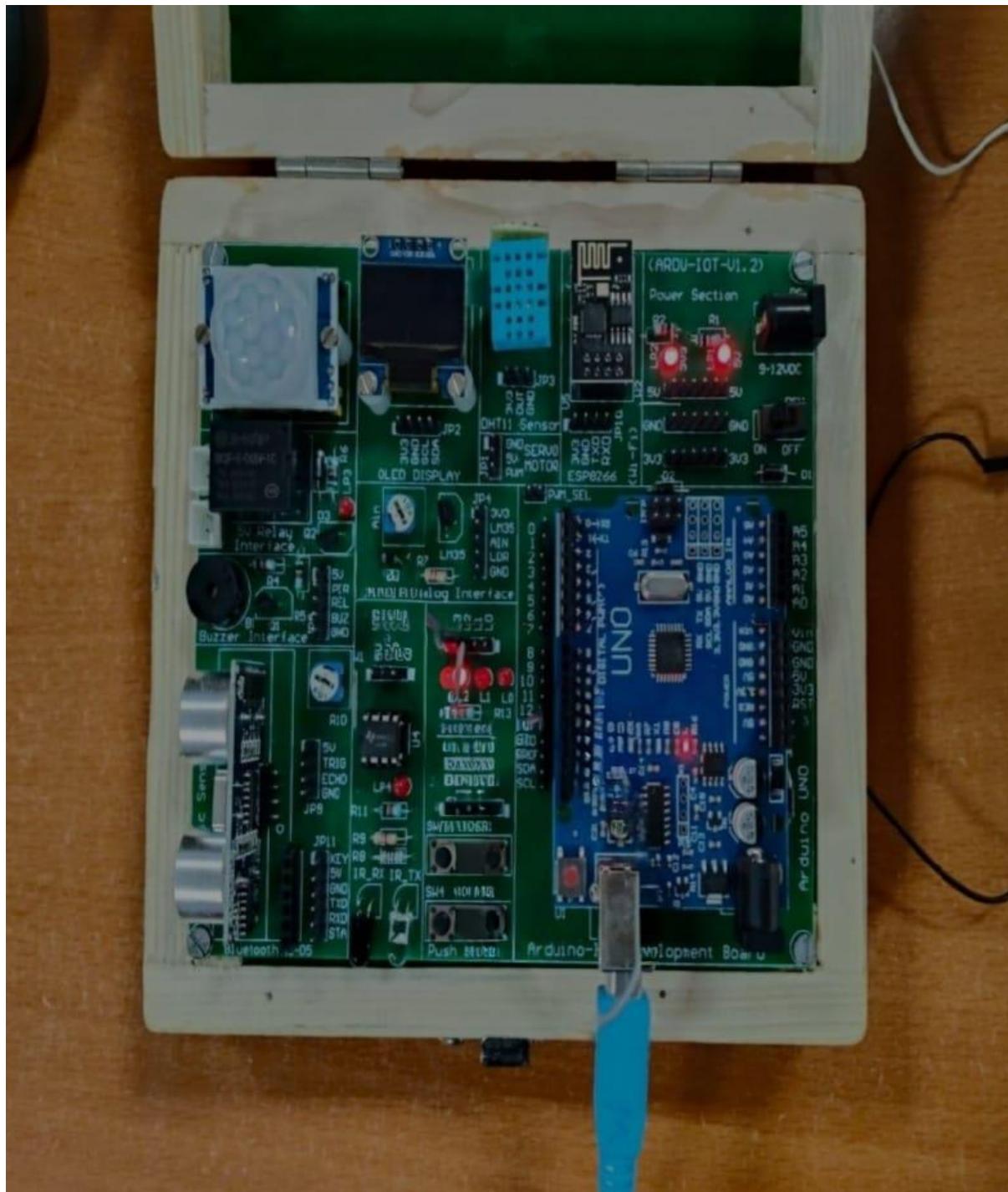# Experiment NO 6

//Write a program that asks the user for a number and outputs the number squared that is entered.

CODE :-

```
void setup() {
  // Start serial communication
  Serial.begin(9600);
  Serial.println("Enter a number to square:");
}

void loop() {
  // Check if data is available
  if (Serial.available() > 0) {
    String input = Serial.readStringUntil('\n'); // Read input until newline
    input.trim(); // Remove any whitespace

    // Convert input to float
    float number = input.toFloat();
    float square = number * number;

    // Display result
    Serial.print("The square of ");
    Serial.print(number);
    Serial.print(" is ");
    Serial.println(square);
  }
}
```

Output:-

File Edit Sketch Tools Help

Arduino Uno

practical6.ino

```arduino
1   //Write a program that asks the user for a number and outputs the number squared that is entered.
2
3
4   void setup() {
5     // Start serial communication
6     Serial.begin(9600);
7     Serial.println("Enter a number to square:");
8   }
9
10  void loop() {
11    // Check if data is available
12    if (Serial.available() > 0) {
13      String input = Serial.readStringUntil('\n'); // Read input until newline
14      input.trim(); // Remove any whitespace
15
16      // Convert input to float
17      float number = input.toFloat();
18      float square = number * number;
19
20      // Display result
21      Serial.print("The square of ");
```

Output   Serial Monitor ×

Message (Enter to send message to 'Arduino Uno on COM5')

```
14:07:44.881 -> Enter a number to square:
14:07:49.271 -> The square of 5.00 is 25.00
14:07:49.959 -> The square of 9.00 is 81.00
14:07:50.529 -> The square of 8.00 is 64.00
```

New Line   9600 baud

Ln 11, Col 32   Arduino Uno on COM5

Match

Type here to search

ENG
IN   2:07 PM
9/10/2025