University Institute of Engineering

Department of Computer Science & Engineering

Experiment: 1.1

Student Name: **UID:**

Branch: Computer Science & Engineering **Section/Group**

Semester: 2nd **Date of Performance:**

Subject Name: Disruptive Technology-2

Subject Code: 22E-21ECH-103

1. Aim of the practical:

Introduction to open-source IoT Platform and basic interfacing Hands-on.

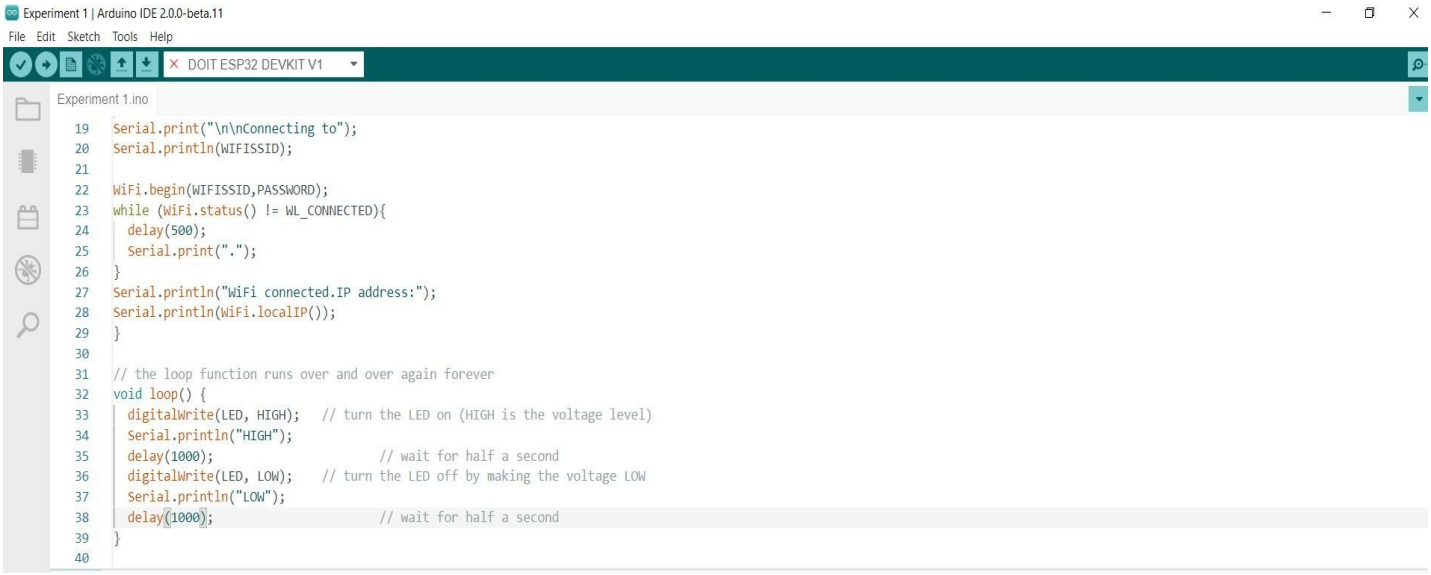
2. Tool Used:

ESP32, LED, Resistor, Breadboard, Arduino.

3. Basic Concept/ Command Description:

The ESP32 boards can be programmed using many different programming languages. For example, you can program your ESP32 board in C++ language(like the Arduino) or MicroPython. And to make use of all of the ESP32 features Espressif has officially provided the Espressif IoT Development Framework.

4. Snap of Code:



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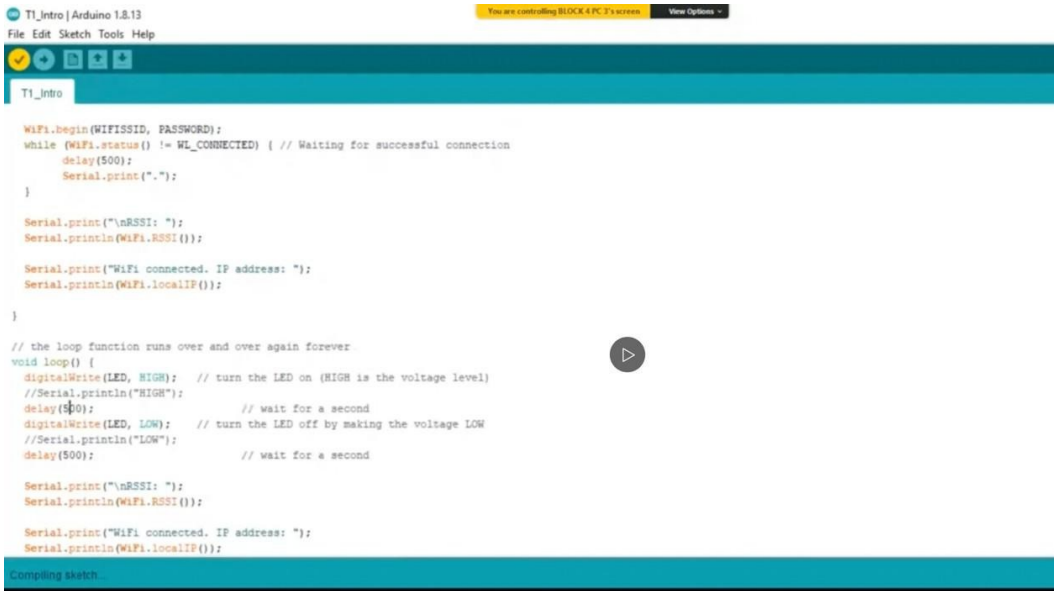
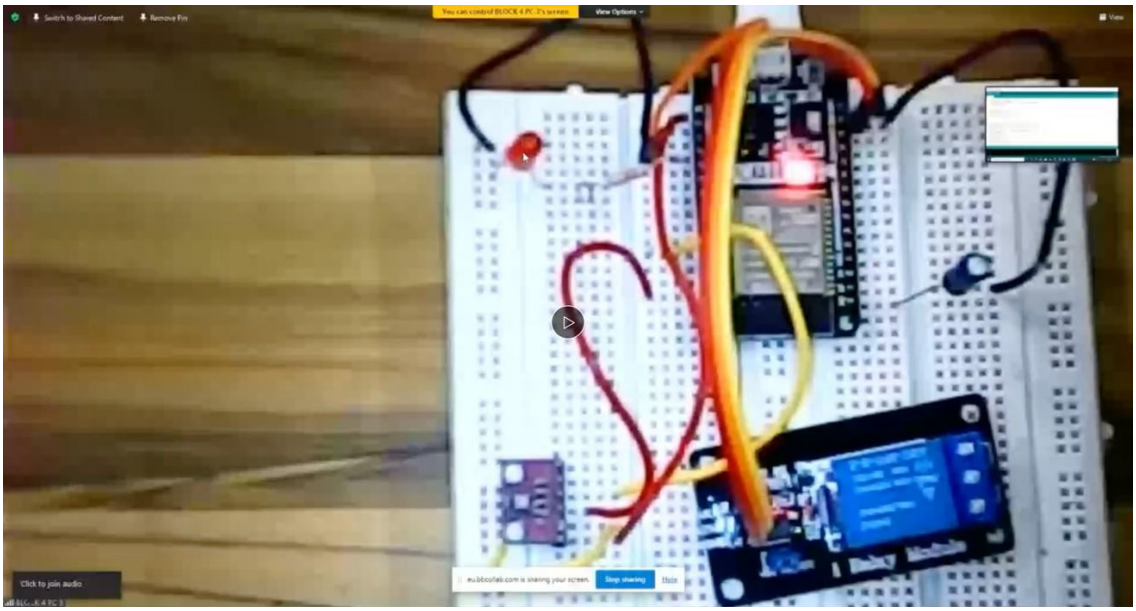
Step 1: Verify the code



STEP 2: Upload the code:

STEP 3: LED TURNS OFF FOR TIME DELAY OF 500 SECONDS



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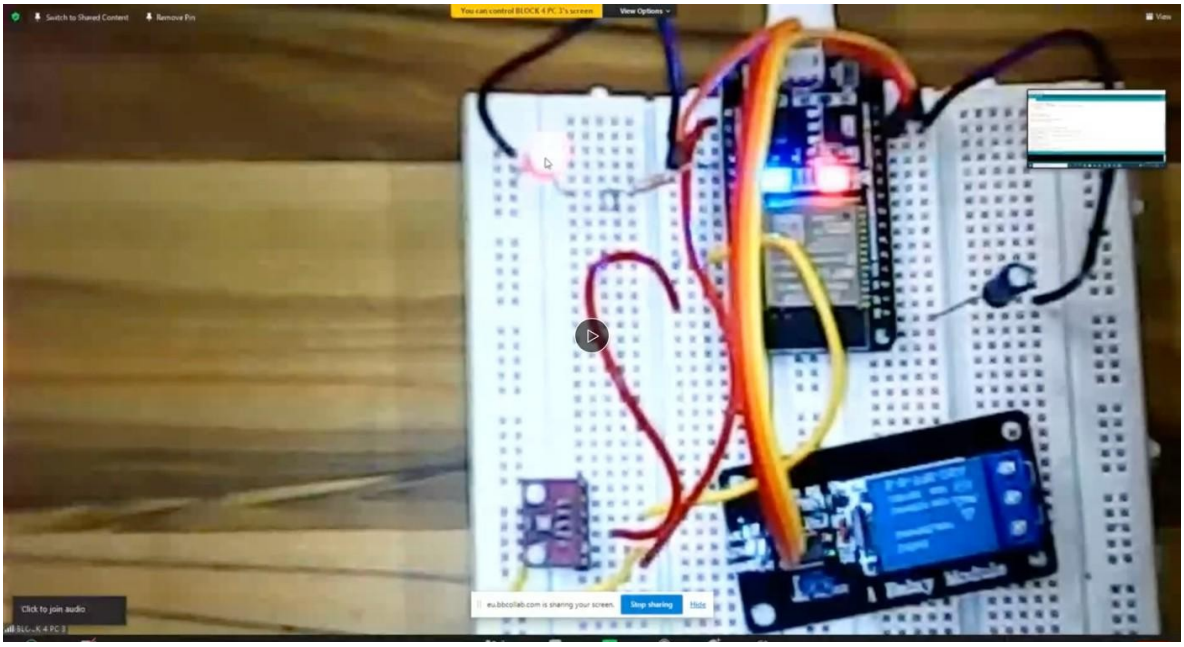
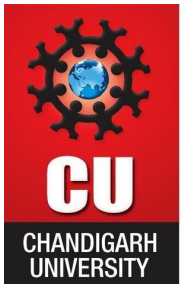
STEP4: LED TURNS ON AFTER TIME DELAY OF 500 SECONDS





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5. Result and Summary:

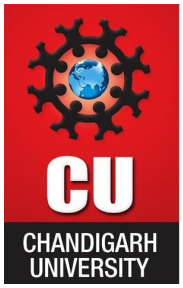
In the Arduino IDE when, We write the code for the program called sketch and is uploaded the same to the circuit using USB the circuit works and as result we see the LED light blinking after the time delay we have set in the code. Hence successfully completing the experiment.

6.Learning outcomes (What I have learnt):

1. What is IOT and its applications.
2. How to Remotely Access the LAB's PC to perform experiment.
3. Verify and upload the code to the circuit.
4. How to program and modify the code.
5. The components of ESP32 AND ARDUINO UNO.

Evaluation Grid (To be filled by Faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.	Worksheet completion including writing learning objectives/Outcomes. (To be submitted at the end of the day)		10
2.	Post Lab Quiz Result.		5
3.	Student Engagement in Simulation/Demonstration/Performance and Controls/Pre-Lab Questions.		5
	Signature of Faculty (with Date):	**Total Marks Obtained:**	**20**



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