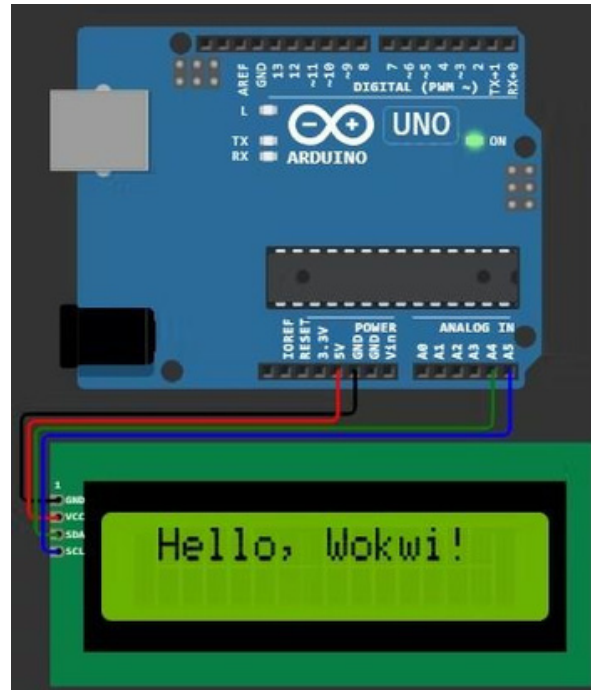# What is Arduino?

Arduino is an open-source electronics platform based on easy-to-use hardware and software. It consists of a programmable circuit board (often referred to as a microcontroller) and an Integrated Development Environment (IDE) that enables users to write and upload code to the board. Here are Key points to include in your notes:

Microcontroller

Arduino boards are equipped with microcontrollers that can be programmed to interact with various inputs and outputs (sensors, lights, motors, etc.).

Open-Source

The platform's hardware designs and software libraries are freely accessible, encouraging collaborative development and customization.

IDE (Integrated Development Environment)

Arduino IDE provides a user-friendly interface for writing and uploading code to the Arduino board.

Programming Language

Arduino uses a simplified version of C++ programming language, maKing it accessible for beginners yet powerful for advanced users.

Versatility

It is widely used in hobbyist projects, prototyping, and even in industrial applications due to its versatility and ease of use.

Applications

It is used in robotics, automation, IoT (Internet of Things), interactive art projects, and educational purposes, among others.

Understanding Arduino opens up opportunities to create interactive electronics projects and delve into the world of physical computing.