

Circuit Connection and Working

Circuit Connection Steps:

1. Powering the Breadboard:

The **breadboard** is powered by the **Arduino**.

2. Buzzer Connection:

- The **positive terminal** of the **buzzer** is connected to **digital pin 13** on the Arduino.
- The **negative terminal** is connected to **GND** on the breadboard.

3. Pushbutton Connections:

- Connect **8 pushbuttons** to the **digital I/O pins** of the Arduino, from **pin 2 to pin 9**, respectively. These buttons act as input pins for tone control.
- **Pull-up resistors** are connected to each of the pushbuttons, and the remaining terminals of the pushbuttons are grounded.

Working:

After powering the circuit and uploading the code to the Arduino, the setup will be ready for testing. Pressing any of the **pushbuttons** will trigger the **buzzer** to emit a sound at a frequency assigned to that particular button. You can easily change the frequency for any button by modifying the frequency value in the code.

