## **Guitar Tuner**

A guitar tuner is a device that helps guitarists to tune their guitars to the desired notes. With the help of an Arduino Uno, we can build a digital guitar tuner that detects the frequency of each string and displays the tuning of the string with the help of LEDs. The frequency of the string's vibrations is compared to the ideal frequency for that string, and the deviation is shown accordingly. With the help of Arduino Uno, we can build a guitar tuner and customize it to our liking.



## Materials required:

- Arduino Uno
- TL082 Dual JFET Input Op Amp
- Different coloured LEDs
- Battery
- Snap connector
- Power plug
- Switch
- Audio Jack
- Circuit board
- Resistors
- Capacitors
- Acrylic Sheet