



The Arduino can turn things on and off very fast, so it is capable of producing a square wave in the audible frequency range (approx 20hz - 20 khz). The square wave can be sent to a speaker to produce tones. It is not recommended to run square waves to sound equipment at high levels or for long periods of time as it can damage equipment.

```

    setup
      int = variable button
           value 3
      int = variable speaker
           value 2
    loop
      test digitalRead() # button = LOW
      while Commands
        delay ms milliseconds 10
        tone pin# speaker
              frequency 480
        delay ms milliseconds 400
        tone pin# speaker
              frequency 131
        delay ms milliseconds 400
        tone pin# speaker
              frequency 800
        delay ms milliseconds 400
        tone pin# speaker
              frequency 330
        delay ms milliseconds 400
        noTone pin# speaker
  
```



The tone is generated by a separate part of the Arduino, so we can do other things with the program while the tone is operating.

We need to tell the tone to stop generating, otherwise it will continue on indefinitely.