```
clear


mylego = legoev3('usb'); % Make connection to the Lego EV3 robot

mysonicsensor = sonicSensor(mylego); % Creates connection to ultrasonic
sensor

x = 0;

while (x == 0)
    proximity = readDistance(mysonicsensor); % Find distance with sensor
    % Far Away Distance
    if(proximity > 0.75) % If proximity is greater than 0.75 meters
        clearLCD(mylego)
         writeLCD(mylego,'Far Away');
         disp("Far Away")
           writeStatusLight(mylego, 'green', 'solid');
            playTone(mylego, 500, 1, 10);
         pause(0.3)
    end
    % Getting Closer Distance
    if(proximity >= 0.3 && proximity <= 0.75) % If proximity is greater than
0.3 meters and less than 0.75 meters
        clearLCD(mylego)
         writeLCD(mylego,'Getting Closer');
         disp("Getting Closer")
         writeStatusLight(mylego, 'orange', 'solid');
            playTone(mylego, 1000, 1, 10);
         pause(0.3)
    end %Ends if statement
    % Close Distance
    if(proximity >= 0.15 && proximity <= 0.3) % If proximity is greater than
0.15 meters and less than 0.3 meters
        clearLCD(mylego)
         writeLCD(mylego,'Close');
         disp("Close")
         writeStatusLight(mylego, 'orange', 'pulsing');
            playTone(mylego, 1500, 1, 10);
         pause(0.3)
     end
     %  Stop Distance
     if(proximity >= 0.03 && proximity <= 0.15) % If proximity is greater
than 0.15 meters and less than 0.03 meters
        clearLCD(mylego)
         writeLCD(mylego,'STOP!');
         disp("STOP!")
         writeStatusLight(mylego, 'red', 'solid');
            playTone(mylego, 2000, 1, 10);
         pause(0.3)
    end
    if(readButton(mylego,'left') == 1) % Used to stop program by pressing
```

```
left button
        x = 1;
    end
end
```

Published with MATLAB® R2023b