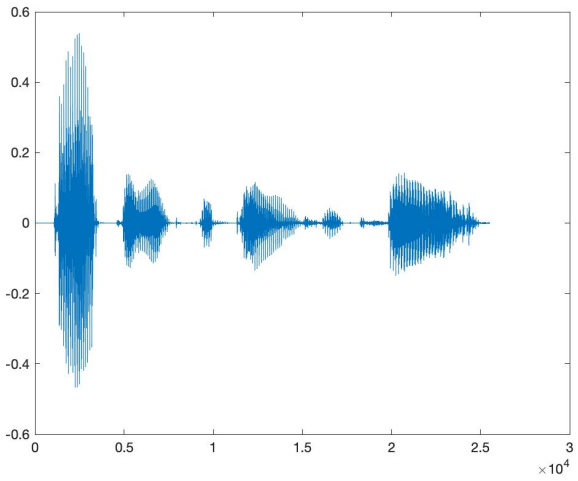
Verify the output produced by this implementation is the same as the output produced by the demo program.

we can use Matlab plot the two wave files.

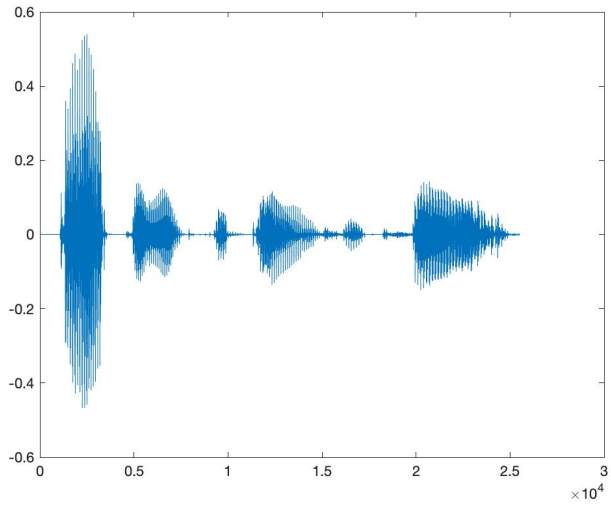
exercise2.m wave.m

```
%%
tic
interval = 44100;
need_exist = false;
index = 1;
while ~need_exist
    try
        [x, fs] = audioread( 'output.wav' , [(index-1)*interval+1, index*interval ]);
    catch
        [x, fs] = audioread( 'output.wav' , [(index-1)*interval+1, inf ]);
        need_exist = true;
    end
    index = index + 1;
    plot(x)
    drawnow
%     pause(0.)
end
toc
```

截屏



Demo wave file.



Output wave file.

The filtered signals of the filter with 8 delay variables and of filter with 4 delay variables are the same.