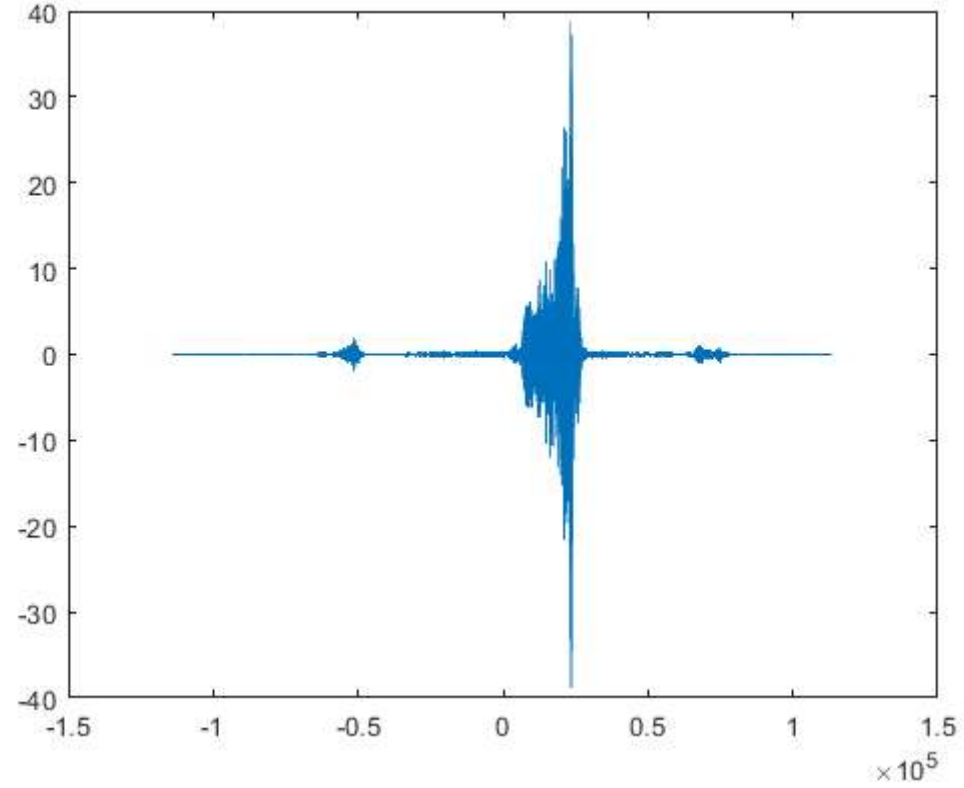
```
function speechrecognition(~)
    %Speech Recognition Using Correlation Method
    %Write Following Command On Command Window
    %speechrecognition('test.wav')
    voice = audioread('test.wav');
    x=voice;
    x=x';
    x=x(1,:);
    y1=audioread('one.wav');
    y1=y1';
    y1=y1(1,:);
    y1=y1';
    z1=xcorr(x,y1);
    m1=max(z1);
    l1=length(z1);
    t1=-((l1-1)/2):1:((l1-1)/2);
    t1=t1';
    %subplot(3,2,1);
    plot(t1,z1);
    y2=audioread('two.wav');
    y2=y2';
    y2=y2(1,:);
    y2=y2';
    z2=xcorr(x,y2);
    m2=max(z2);
    l2=length(z2);
    t2=-((l2-1)/2):1:((l2-1)/2);
    t2=t2';
    %subplot(3,2,2);
    figure
    plot(t2,z2);
    y3=audioread('three.wav');
    y3=y3';
    y3=y3(1,:);
    y3=y3';
    z3=xcorr(x,y3);
    m3=max(z3);
    l3=length(z3);
    t3=-((l3-1)/2):1:((l3-1)/2);
    t3=t3';
    %subplot(3,2,3);
    figure
    plot(t3,z3);
    y4=audioread('four.wav');
    y4=y4';
    y4=y4(1,:);
    y4=y4';
    z4=xcorr(x,y4);
    m4=max(z4);
    l4=length(z4);
    t4=-((l4-1)/2):1:((l4-1)/2);
    t4=t4';
    %subplot(3,2,4);
    figure
    plot(t4,z4);
    y5=audioread('five.wav');
    y5=y5';
    y5=y5(1,:);
    y5=y5';
    z5=xcorr(x,y5);
```

```
m5=max(z5);
l5=length(z5);
t5=-((l5-1)/2):1:((l5-1)/2);
t5=t5';
%subplot(3,2,5);
figure
plot(t5,z5);
m6=300;
a=[m1 m2 m3 m4 m5 m6];
m=max(a);
h=audioread('allow.wav');
if m<=m1
    soundsc(audioread('one.wav'),50000)
        soundsc(h,50000)
elseif m<=m2
    soundsc(audioread('two.wav'),50000)
        soundsc(h,50000)
elseif m<=m3
    soundsc(audioread('three.wav'),50000)
        soundsc(h,50000)
elseif m<=m4
    soundsc(audioread('four.wav'),50000)
        soundsc(h,50000)
elseif m<m5
    soundsc(audioread('five.wav'),50000)
        soundsc(h,50000)
else
   soundsc(audioread('denied.wav'),50000)

end
```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-20
-30
-40
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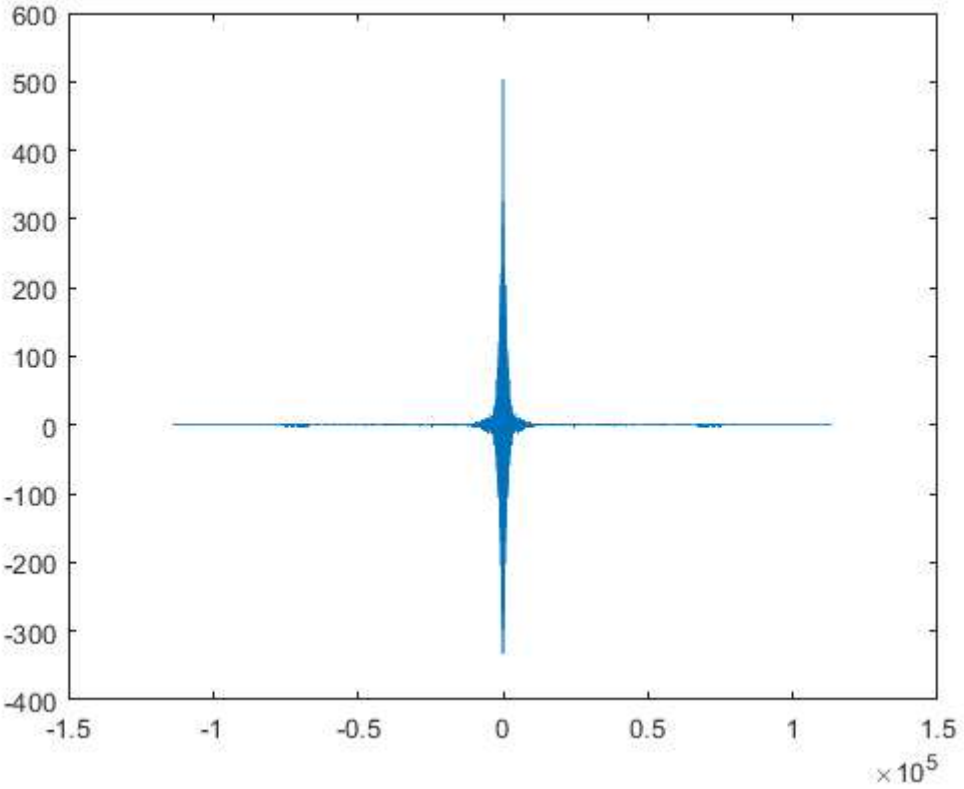
-1
-0.5
0
0.5
1
1.5
×10^5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-1
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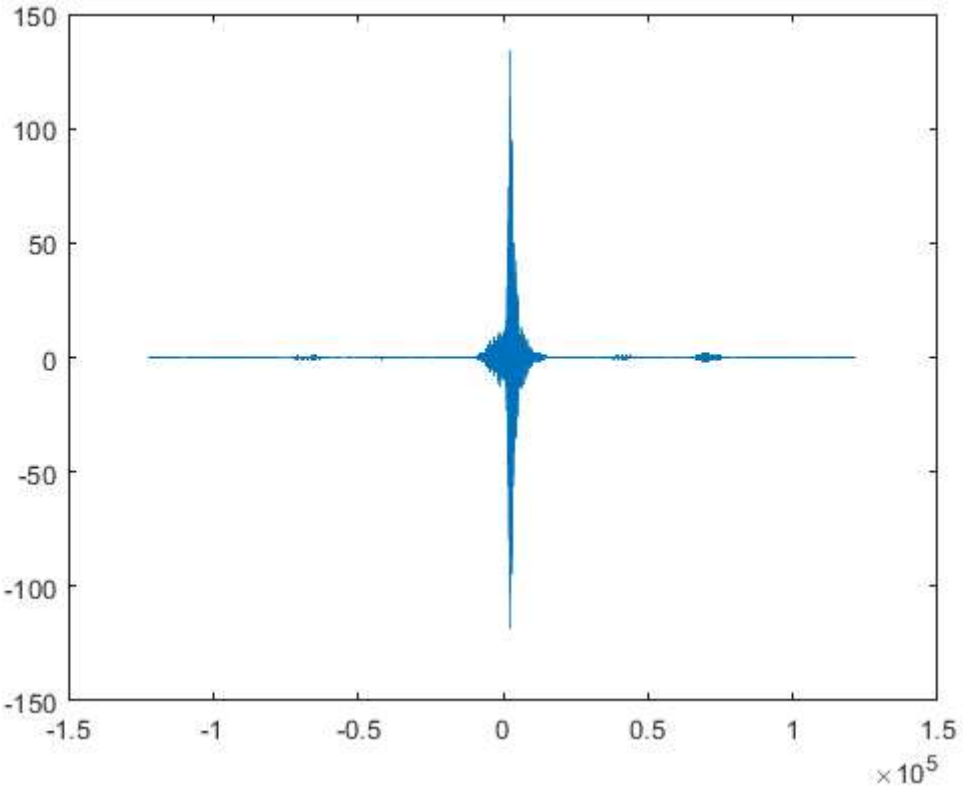
0.5
1
1.5
×10^5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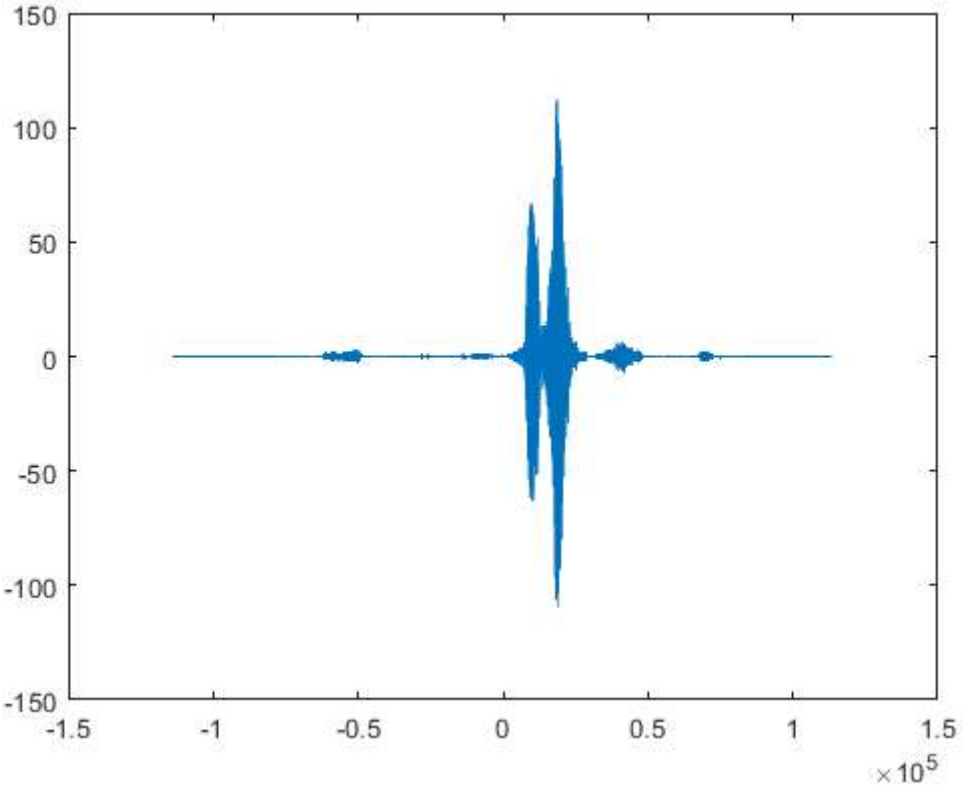
1
1.5
×10^5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-1
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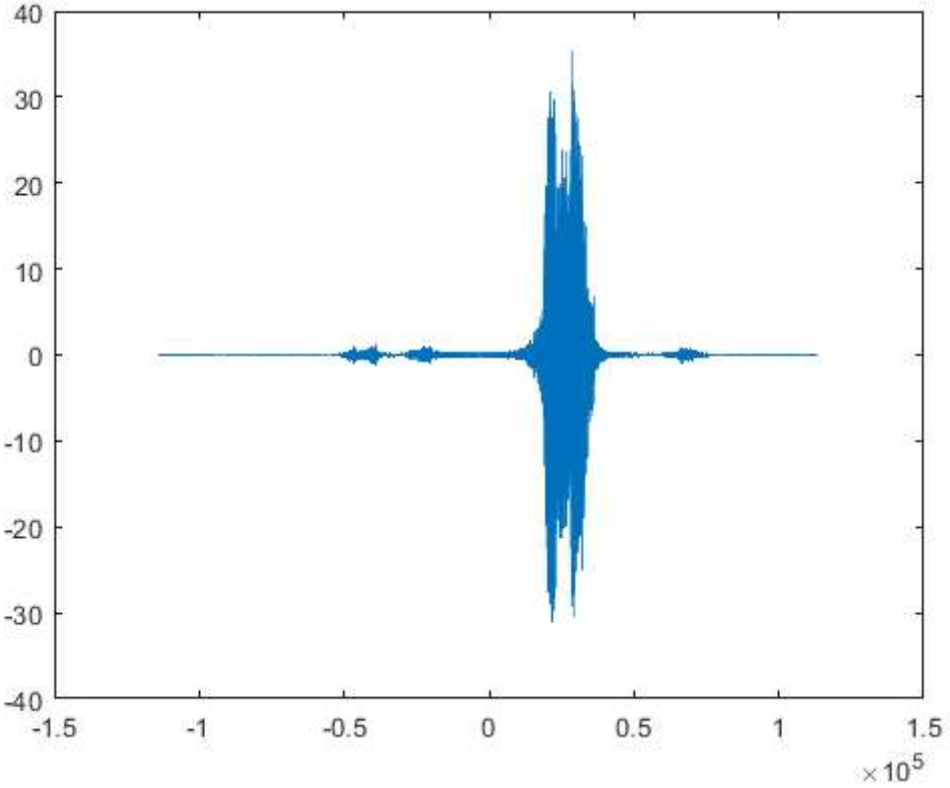
×10^5



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