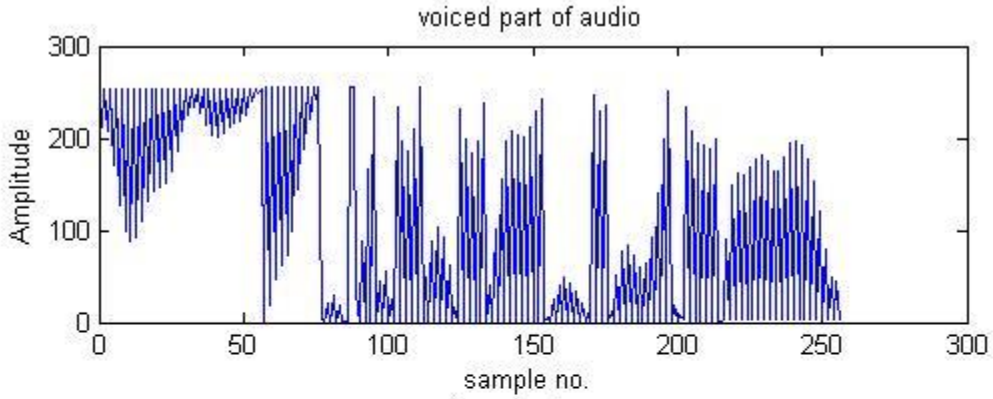
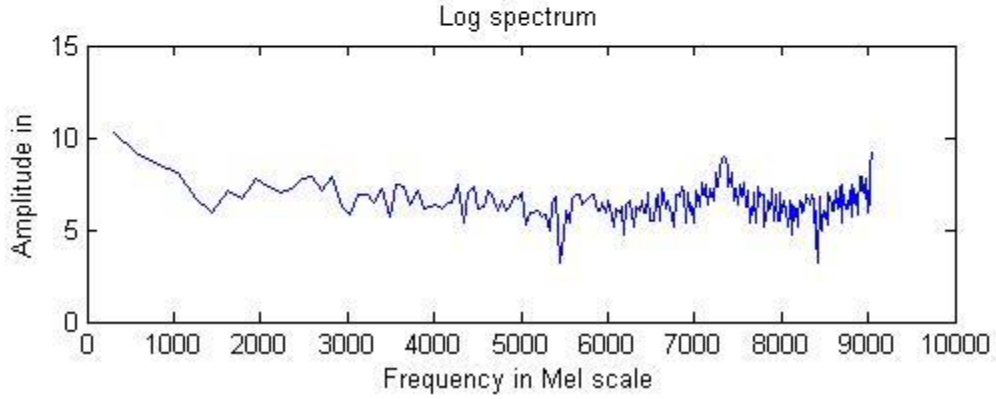
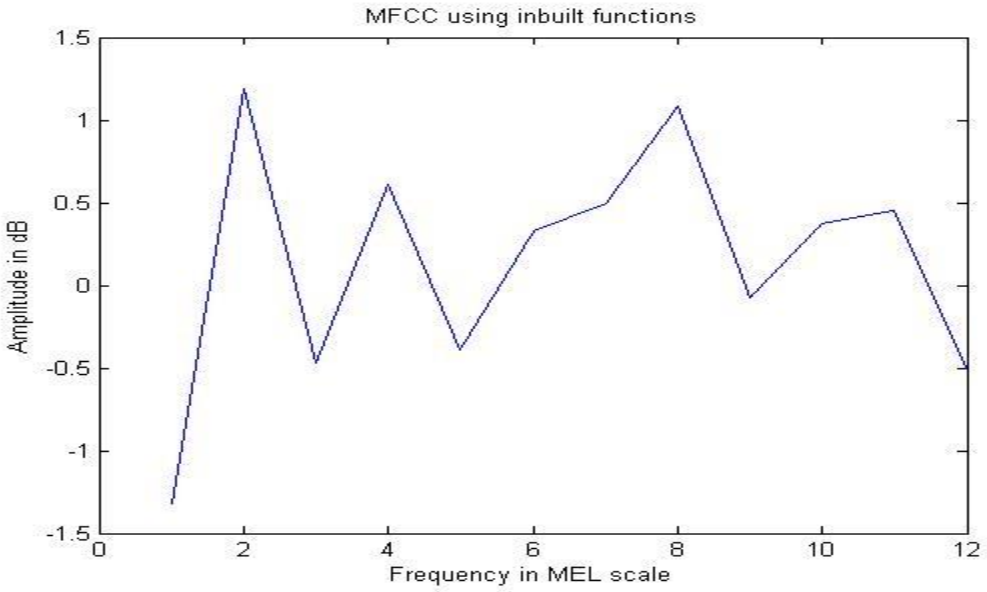
Experiment 29

MFCC of voiced speech signal

```
clear all;
fp = fopen('test.wav');
fseek(fp,224000,-1);
a = fread(fp,256);

subplot(2,1,1);plot(a);title('voiced part of audio');
xlabel('sample no. ');ylabel('Amplitude');
b = fft(a);
b1 = abs(b);
c = log(b1);
for i = 1:256,
    f(i) = 2210O/256*i;
end
for i = 1:256,
    c1(i) = c(i);
end

for i = 1:256,
    m(i) = 2595*log(1+f(i)/700);
end

subplot(2,1,2);plot(m,c1);title('Log spectrum');
xlabel('Frequency in Mel scale');ylabel('Amplitude in');

x=melcepst(a);
figure;
plot(x);title('MFCC using inbuilt functions');
xlabel('Frequency in MEL scale');ylabel('Amplitude in dB');
```







Conclusion

Mel Frequency computation is correctly done

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