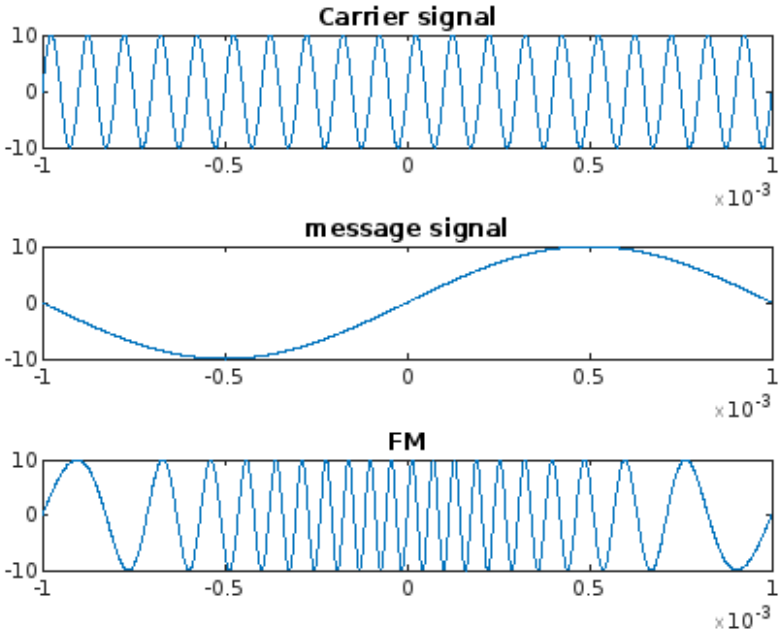
```
close all;
clear all;
t=-0.001:0.000001:0.001;
% v = A sin [ wct + (#f / fm) sin wmt ]
tf=7500;
fc=10000;
df=1/tf;
A=10;
fm=500;
mf=df/fm;
wm=2*pi*fm;
wc=2*pi*fc;
cs=A*sin(wc*t);
ms=A*sin(wm*t);
v=A*sin((wc*t)+((tf/fm)*sin(wm*t)));
subplot(3,1,1)
plot(t,cs);
title('Carrier signal')
subplot(3,1,2)
plot(t,ms);
title('message signal');
subplot(3,1,3)
plot(t,v);
title('FM')
```



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