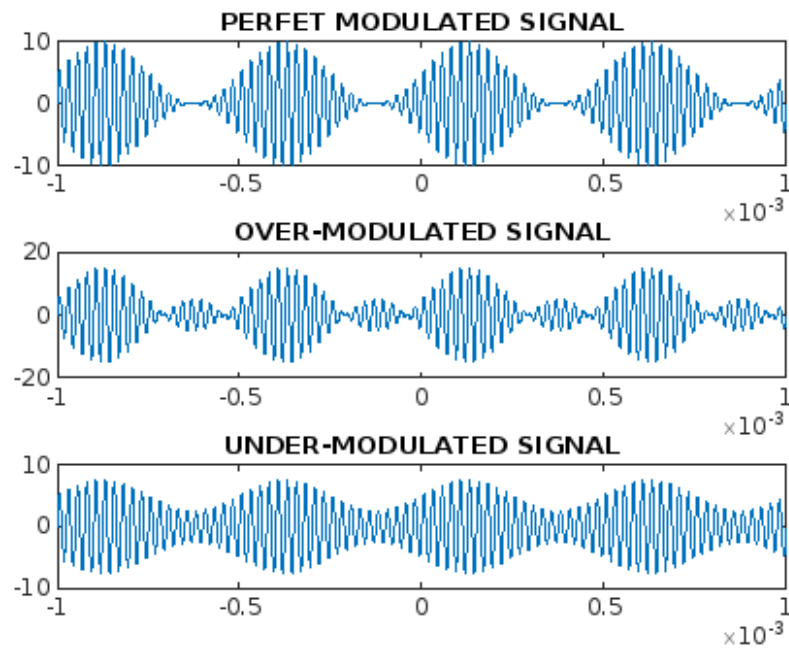


---

```
clc;
close all;
clear all;
m=1;
Am=5;
fm=2000;
tm=1/fm;
t=-0.001:0.000001:0.001;
%modulating signal
xm=Am*sin(2*pi*fm*t);
%carier signal
Ac=Am/m;
fc=fm*20;
Tc=1/fc;
xc=Ac*sin(2*pi*fc*t);
%AM
am1=xc.*(1+m.*xm/Am);
subplot(3,1,1);
plot(t,am1);
title('PERFET MODULATED SIGNAL');
%OVER MODULATED
m=2;
am2=xc.*(1+m.*xm/Am);
subplot(3,1,2);
plot(t,am2);
title('OVER-MODULATED SIGNAL');
%UNDER MODULATED
m=0.5;
am3=xc.*(1+m.*xm/Am);
subplot(3,1,3);
plot(t,am3);
title('UNDER-MODULATED SIGNAL');
```



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