

%Phase Modulation

```
clc;
clear all;
t = 0: 0.0001: .2;
Vm = 3;
Vc = 3;
fm = 7;
fc = 50;
m = 25;

v = Vm*sin(2*pi*fm*t);
subplot(3,1,1);
plot(t,v);
xlabel('t ---->');ylabel('Amplitude ---->');
title('Message Signal');

c = Vc*sin(2*pi*fc*t);
subplot(3,1,2);
plot(t,c);
xlabel('t ---->');ylabel('Amplitude ---->');
title('Carrier Signal');

p = Vc*sin((2*pi*fc*t) +( m.* v));
subplot(3,1,3);
plot(t,p);
title('Phase Modulated Signal');
xlabel('t ---->');ylabel('Amplitude ---->');
```