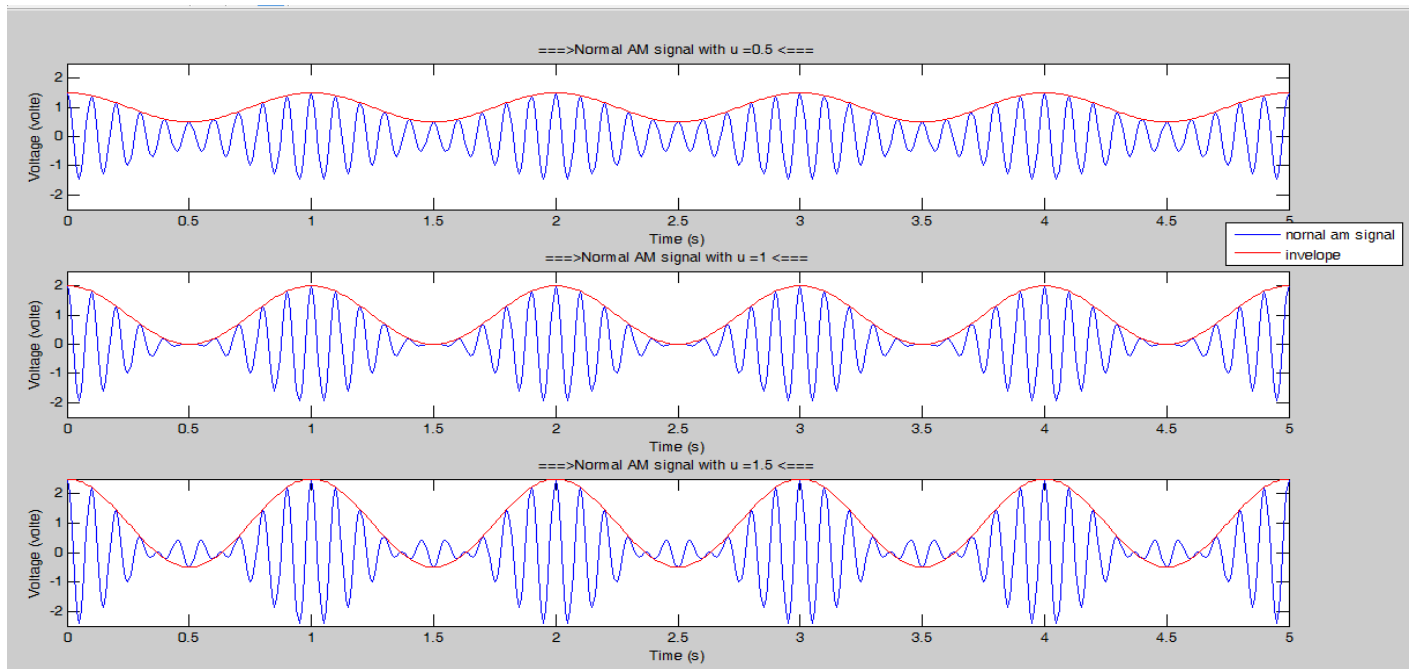


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Homework #2

```
t = 0:0.01:5 ;  
m = 0.5 ;  
for i = 1:1:3  
  
subplot(3,1,i);  
  
y = (1+m*cos(2*pi*t)).*cos(2*pi*10*t);  
plot (t,y)  
axis([0 5 -2.5 2.5])  
hold on  
y = (1+m*cos(2*pi*t));  
plot (t,y,'r')  
axis([0 5 -2.5 2.5])  
xlabel('Time (s)');  
ylabel('Voltage (volte)');  
if i == 1  
title('==>Normal AM signal with u =0.5 <==');  
end  
if i == 2  
title('==>Normal AM signal with u =1 <==');  
end  
if i == 3  
title('==>Normal AM signal with u =1.5 <==');  
end  
m =m+ 0.5;  
end
```



If we want study the frequency effect :

```
t = 0:0.01:5 ;
m = 0.5 ;
for i = 1:1:2

subplot(2,1,i);
if i==1
y = (1+m*cos(2*pi*t)).*cos(2*pi*4*t);
end
if i == 2
y = (1+m*cos(2*pi*t)).*cos(2*pi*25*t);
end
plot (t,y)
axis([0 5 -2.5 2.5])
hold on
y = (1+m*cos(2*pi*t));
plot (t,y,'r')
axis([0 5 -2.5 2.5])
xlabel('Time (s)');
ylabel('Voltage (volte)');
if i==1
title('===>Normal AM signal with u =0.5 And Frequency = 4HZ <===');
end

if i == 2
title('===>Normal AM signal with u =0.5 And Frequency = 25HZ <===');
end

end
```

