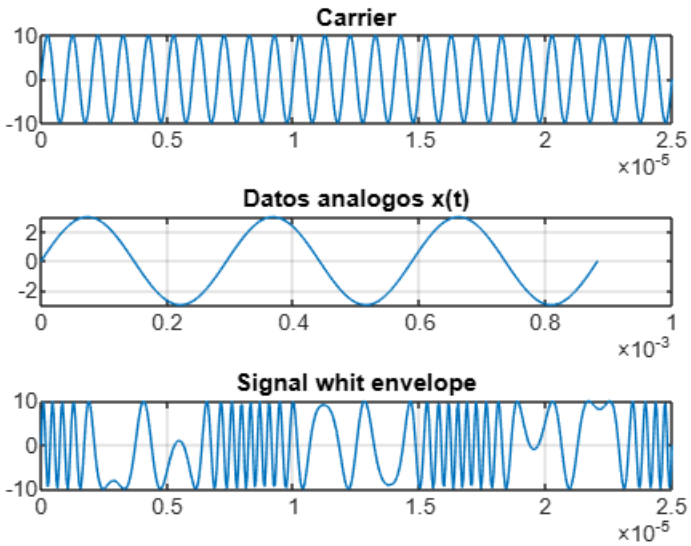
```
clc, clear all, close all
%-------------Input--------------
%Señal analoga
Ax = 3;
fx = 3400;
%Carrier
fc = 1000e3;
Tc = 1/fc;
Ac = 10;
pc = 0;
tc = linspace(0,25*Tc,500);
%Indice de modulacion
n = 5; % n <= 2
%-----Proceso
%Datos analogos
Tx = 1/fx;
tx = linspace(0,3*Tx,500);
xt = Ax *sin(2*pi*fx*tx)
```

```
xt = 1×500
         0    0.1133    0.2264    0.3392    0.4516    0.5633    0.6741    0.7841 ···
```

```
%señal fm con carrier}
carrier = Ac*sin(2*pi*fc*tc);
FM = Ac*sin(2*pi*fc*tc+n*xt)
```

```
FM = 1×500
         0    7.7155    9.8183    4.8030   -3.6667   -9.4855   -8.5407   -1.5871 ···
```

```
figure(2)
subplot(3,1,1), plot(tc, carrier), title('Carrier'), grid on
subplot(3,1,2), plot(tx, xt), title('Datos analogos x(t)'), grid on
subplot(3,1,3), plot(tc, FM), title('Señal FM'), grid on
plot(tc, FM), title('Signal whit envelope'), grid on
```


Carrier
10
0
-10
0
0.5
1
1.5
2
2.5
×10-5
Datos analogos x(t)
2
0
-2
0
0.2
0.4
0.6
0.8
1
×10-3
Signal whit envelope
10
0
-10
0
0.5
1
1.5
2
2.5
×10-5