close all;

data=input('Enter the input');

a=[];

b=[];

l=length(data);

t=linspace(0,1,100\*l);

A=5;

f=20;

x=A\*sin(2\*pi\*f\*t);

for i=1:l;

if data(i)==1

a=ones(1,100);

else

a=zeros(1,100);

end

b=[b a];

end

subplot(3,1,1)

plot(b)

axis([0 100\*l -2 2])

subplot(3,1,2)

plot(x)

p=x.\*b;

subplot(3,1,3)

plot(p)



A=5;

f=20;

x=A\*sin(2\*pi\*f\*t);

for i=1:l;

if data(i)==1

a=ones(1,100);

else

a=-1\*ones(1,100);

end

b=[b a];

end

subplot(3,1,1)

plot(b)

axis([0 100\*l -2 2])

subplot(3,1,2)

plot(x)

p=x.\*b;

subplot(3,1,3)

plot(p)



clc;

clear all;

close all;

data=input('Enter the input');

a=[];

b=[];

l=length(data);

t=linspace(0,1,100\*l);

A=10;

f1=1000;

f2=10;

x1=A\*sin(2\*pi\*f1\*t);

x2=A\*sin(2\*pi\*f2\*t);

for i=1:l;

if data(i)==1

a=ones(1,100);

else

a=zeros(1,100);

end

b=[b a];

end

subplot(4,1,1)

plot(b)

xlabel('Time')

ylabel('amplitude')

title('binary input')

axis([0 100\*l -2 2])

subplot(4,1,2)

plot(x1)

xlabel('Time')

ylabel('amplitude')

title('high freq.carrier signal')

subplot(4,1,3)

plot(x2)

xlabel('Time')

ylabel('amplitude')

title('low freq.carrier signal')

p=(b.\*x1)+((-b).\*x2);

subplot(4,1,4)

plot(p)

xlabel('Time')

ylabel('amplitude')

title('FSK signal')

