clc;

clear all;

close all;

t=-10:.01:10;

n=-10:1:10;

fm=0.25;

T=0:20;

x=cos(2\*pi\*fm\*t)

subplot(2,2,1)

plot(t,x)

xlabel('time')

ylabel('amplitude')

title('cosine signal')

fs1=1.2\*fm;

fs2=2\*fm;

fs3=4\*fm;

xn1=cos(2\*pi\*n\*(fm/fs1));

subplot(2,2,2); stem(n,xn1);

hold on;

subplot(2,2,2);

plot(n,xn1)

xlabel('time')

ylabel('amplitude')

title('fs1=1.2\*fm')

n=-10:1:10;

xn2=cos(2\*pi\*n\*(fm/fs2));

subplot(2,2,3); stem(n,xn2);

hold on;

subplot(2,2,3);

plot(n,xn2)

xlabel('time')

ylabel('amplitude')

title('fs2=2\*fm')

n=-10:1:10;

xn3=cos(2\*pi\*n\*(fm/fs3));

subplot(2,2,4); stem(n,xn3);

hold on;

subplot(2,2,4);

plot(n,xn3)

xlabel('time')

ylabel('amplitude')

title('fs3=4\*fm')