

```

close all;
clc;
close all; clc;
x=input("enter the input sequence:");
N=input("enter the value of N for N point dft :");
N2=length(x);
if(N~=N2 && N>N2)
    x=[x,zeros(1,N-N2)];
end
y=zeros(1,N);
j=sqrt(-1);
for k=1:N
    for n=1:N
        y(k)=y(k)+(x(n)*(exp(-j*2*pi*(k-1)*(n-1)/N)));
    end
end
fprintf("The N point DFT X(K) is:");
disp(y)
figure,
subplot(4,1,1),
stem(x),title('Input signal'),
xlabel('n'),
ylabel('x[n]');

subplot(4,1,2),
stem(y),title('DFT signal'),
xlabel('k'),
ylabel('y[k]');

subplot(4,1,3),
stem(abs(y)),title('Magnitude of Y[K]'),
xlabel('N'),
ylabel('y[k]');

subplot(4,1,4),
stem(angle(y)),title('Phase of Y[K]'),
xlabel('N'),
ylabel('Angle(Y(K))');

```

Error using input
Cannot call INPUT from EVALC.

Error in DFT (line 4)
x=input("enter the input sequence:");

