```
%dft with and without using inbuilt functions
clc;
clear all;
close all;

x=input("enter the sequence");
N=input("enter the value of Nfor N point dft");
L=length(x);
if N>=L
    xn=[x zeros(1,N-L)];
end
X=zeros(1,N);

%DFT WITHOUT INBUILT
for k=0:N-1
    for n=0:N-1
        X(k+1)=X(k+1)+xn(n+1).*exp(-1i*2*pi*n*k/N);
    end
end
disp(round(X,5));

%using fft
Y=fft(xn,N);
disp(Y);
%magnitude spectrum

mag=abs(X);
subplot(2,1,1);
stem(0:N-1,mag);
title("magnitude spectrum");
xlabel("frequency index");
ylabel("magnitude");

%phase spectrum
ph=angle(X);
subplot(2,1,2);
stem(0:N-1,ph);
title("phase spectrum");
xlabel("frequency index");
ylabel("phase");
```

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Error using input
Cannot call INPUT from EVALC.

Error in experiment6 (line 6)
x=input("enter the sequence");
  ^^^^^^^^^^^^^^^^^^^^^^^^^^
```

*Published with MATLAB® R2024b*