

## Experiment No : 07

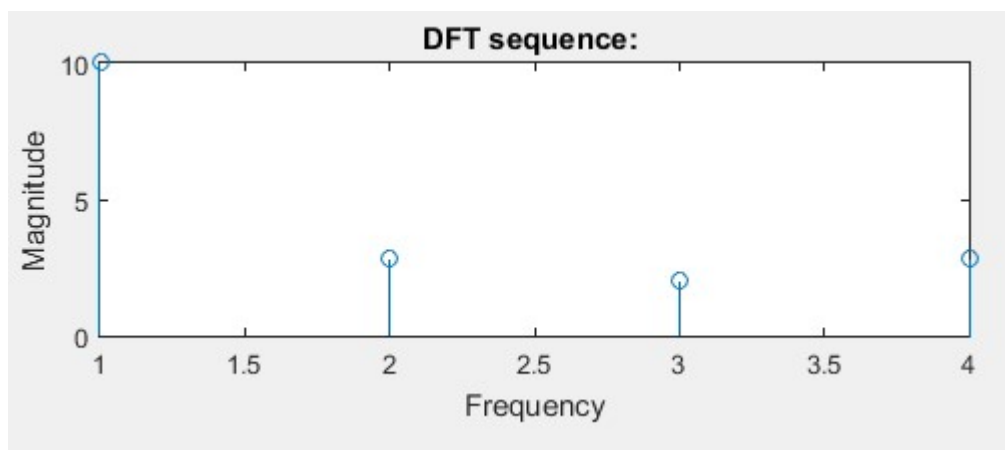
**Experiment Name :** Evaluate DFT of given sequence using MATLAB.

**Objectives:** The main objectives is to evaluate DFT of given sequence

### Source Code:

```
%DFT
x=[1 2 3 4]
[N]=length(x);
x=x.';
n=0:N-1;
for k=0:N-1
    Xk(k+1)=exp(-i*2*pi*n*k/N)*x;
End
Xk
mgXk = abs(Xk);
subplot (2,1,1);
stem(x,mgXk);
title ('DFT sequence: ');
xlabel('Frequency');
ylabel('Magnitude');
```

### Output :



### Discussion:

In this lab we can learn about how to evaluate DFT and also learn how to plot those signals.