

# LAB 4

**Aim :-** To plot the given sub-graphs by recognizing its algorithm

**Code :-**

```
clc
clear
close all;
x = -20:20;
y1 = zeros(1,length(x));
y2 = zeros(1,length(x));
y3 = zeros(1,length(x));
subplot(2,2,1);
for i = 1:length(x)
    if x(i) == 0
        y1(i) = 1;
    else
        y1(i) = 0;
    end
end
stem(x,y1,'rd');
title("Unit Impulse Sequence");
xlabel('Time(Sec) ->');
ylabel('Voltage(Volt) ->');
subplot(2,2,2);
for i = 1:length(x)
    if x(i) >= 0
        y2(i) = 1;
    else
        y2(i) = 0;
    end
end
stem(x,y2,'m');

title("Unit Step Sequence");
xlabel('Time(Sec) ->');
ylabel('Voltage(Volt) ->');
subplot(2,2,3);
for i = 1:length(x)
    if x(i) >= 0
        y3(i) = x(i);
    else
        y3(i) = 0;
    end
end
plot(x,y3,'k');
title("Ramp Sequence");
xlabel('Time(Sec) ->');
ylabel('Voltage(Volt) ->');
subplot(2,2,4);
y4 = sin(x);
stem(x,y4,'y');
title("Sine Sequence");
xlabel('Time(Sec) ->');
ylabel('Voltage(Volt) ->');
```