

```
% 2. unit step signal x1(t) & unit step signal x2(t)

clc;
clear all;
close all;

n = input("Enter the value of n: ");
n1 = 0:1:n-1;
a = input("Enter the value of a: ");

x1 = ones(1,n);
x2 = ones(1,n);
y = conv(x1,x2);

subplot(3,1,1);
stem(n1,x1);
hold on;
xlabel("Time axis");
ylabel("Amplitude");
title("Unit Step Signal");

subplot(3,1,2);
stem(n1,x2);
hold on;
xlabel("Time axis");
ylabel("Amplitude");
title("Unit Step Signal");

subplot(3,1,3);
stem(y); hold on;
xlabel("No of Samples");
ylabel("Amplitude");
title("Output response of LTI System");
```

