

```
% 3.Exponential signal x1(t) & Exponential signal x2(t)

clc;
clear all;
close all;

n = input("Enter the value of n: ");
n1 = 0:1:n-1;
a1 = input("Enter the value of a1: ");
a2 = input("Enter the value of a2: ");
x1 = exp(a1*n1);
x2 = exp(a2*n1);
y = conv(x1,x2);

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

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

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

