**Task1**

%Convolution in time domain

%Lab 9, In Lab

clc;clear;close all

syms t s

x=5\*exp(-t)\*heaviside(t)

h=t\*exp(-t)\*heaviside(t)

X=laplace(x,s);

H=laplace(h,s);

R=ilaplace(X\*H,t);

ezplot(R,[0 16]);

ylim([-0.1 1.5])

title('Time domain convolution using Laplace transform property')

figure

t=0:0.01:8

x=5.\*exp(-t).\*heaviside(t)

h=t.\*exp(-t).\*heaviside(t)

y=conv(x,h);

plot(0:.01:16,y);

title(' Time domain convolution using conv command ')

ylim([-0.1 150])