

Hb) Command window

close all

clear

clc

Symsy x t:

ode1 = diff(x,t) - 2x = exp(-2t);

ode2 = -diff(y,t) + y = exp(t);

ODEs = ode1 ; ode2,

ysol = dsolve(ODEs)

cond1 = (x == 0)

cond2 = (y == 0)

cond = [cond1, cond2]

Ysol = dsolve(ODEs, cond)

i) (x_solt, y_solt) = dsolve(ODEs, cond).

ii) x_solt(t) = Xsol;

y_solt(t) = Ysol;

plot(x_solt)

hold on

plot(y_solt)

axis on

grid on.

1) Command window

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Syms n(t), t.

odf = diff(n(t), 2) - diff(n(t)) - 11t + 12.5.

Da = diff(n, t)

ysoc = dsol(Code)

Cond1 = (n == 5) / 2

Cono2 = (n == -0.5)

ConL = (Cono1, Cono2)

ysol = dsol(Code, Cono)

t = 0: 0.1: 1.5

fn = subs(ysol, t)

plot(tn, fn)