**YAKUBU NATHAN BALA**

**17/ENG04/076**

**ELECTRICAL ENGINEERING**

**commandwindow**

**clearvars**

**clc**

**format short g**

**syms t kp td tp**

**v = kp\*(1-exp(-((t-td)/tp)))**

**mdata = xlsread('1587203818odevbesdata', 'data1');**

**t1 = mdata(:,1);**

**v = mdata(:,2);**

**V1 = round(mdata(900,2),1)**

**t0 = ones(length(v),1)**

**t = [t0 t1]**

**[mcoeff, mcoeffint, mresid, mresidint, manova] = regress (v,t);**

**%mcoeff**

**%rsquaredvalue = mcoeff(1)**

**mcoeff**

**manova**

**kp = V1**

**td = -mcoeff(1)**

**tp = mcoeff(2)**

**plot(t,v(:,1));**

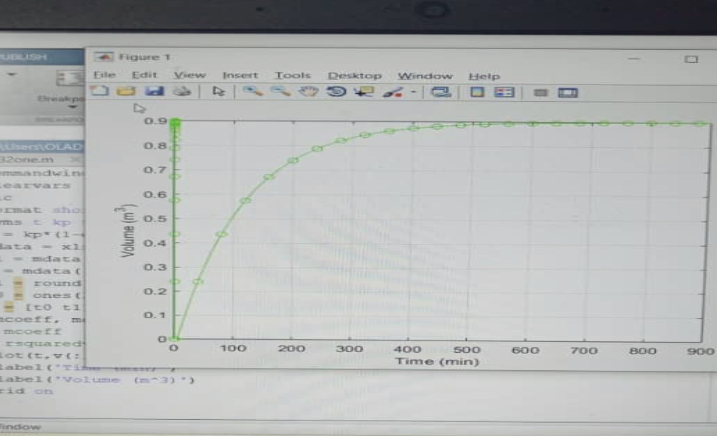
**grid on**

**grid minor**

**Beta = nlinfit(V,t,vf,beta0)**

**Beta0 = [t0 t1 ]**

**Plot(t,Beta)**

****

**Command window**

**Clear**

**Clc**

**Format store g**

**Syms t kp td tp**

**Mdata =xls read(‘1587203818odevbesdata’, ‘data1’);**

**T1=mdata(:,1);**

**V=mdata(:,2);**

**To=ones(length(v), 1)**

**T=(To T1)**

**Y=@(kp,td,tp)(-((exp(T1)-exp(td))/exp(tp)));**

**Initials=(0.1,0.1,0.1)**

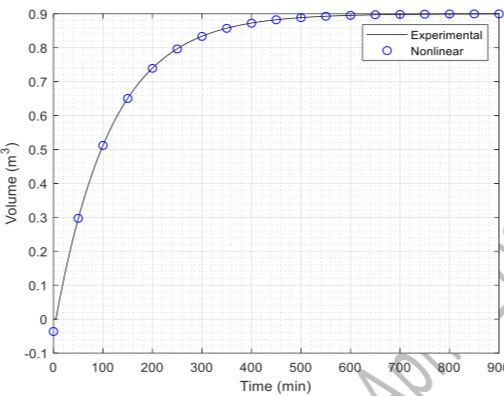
**%(mcoeff, mcoeffint, mresid, mresidint, manova)=nlinfit (v,t,y,initials)**

**%mcoeff**

**Plot(t,v)**

**Grid on**

**Grid minor**

******