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**Matric Number: 17/ENG03/024**

**Course Code: ENG382**

**Course Title: Engineering Maths**

**ASSIGNMENT 5**

1. commandwindow
2. clearvars
3. clc
4. format short g
5. syms t kp td tp
6. v = kp\*(1-exp(-((t-td)/tp)));
7. mdata = xlsread(' 1587203818odevbesdata', 'data1');
8. t1 = mdata(:,1);
9. v = mdata(:,2);
10. V1 = round(mdata(900,2),1)
11. t0 = ones(length(v),1)
12. t = [t0 t1]
13. [mcoeff, mcoeffint, mresid, mresidint, manova] = regress(v,t);
14. % mcoeff
15. % rsquaredvalue=mcoeff(1)
16. plot(t,v);
17. xlabel('Time (min)')
18. ylabel('Volume (m^3)')
19. grid on

**GRAPH**

