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Course:B.Sc(H)Physics

clc;

clear;

clf;

function ydox=f(x,y)

ydox=x\*y

endfunction

x=zeros(7,1)

y=zeros(7,1)

y(1)=5

x(1)=1

h=0.1

for(n=1:6)

x(n+1)=x(n)+h

s1=f(x(n),y(n))

s2=f(x(n)+h/2,y(n)+h\*s1/2)

s3=f(x(n)+h/2,y(n)+h\*s2/2)

s4=f(x(n)+h,y(n)+h\*s3)

s=(s1+2\*s2+2\*s3+s4)/6

y(n+1)=y(n)+h\*s

end

disp( [x y] )

plot(x,y)



