Name-Shailja kant tiwari Roll No.-81 Course-B.Sc(H) Physics

**SOURCE CODE:**

clc;

clear;

clf;

s1=0;s2=0;s3=0;s4=0;s=0;

a=input("How many data points?");

for i=1:a

x(i)=[input("Value of X.")]'

y(i)=[input("Value of Y.")]'

end

disp(x,y);

for i=1:a

s1=s1+sum(x(i)^2);

s2=s2+sum(x(i));

s3=s3+sum(y(i));

s4=s4+sum(x(i)\*y(i));

end

disp(s1,s2,s3,s4);

a1=((s1\*s3)-(s2\*s4))/((a\*s1)-(s2\*s2));

a2=((a\*s4)-(s2\*s3))/((a\*s1)-(s2\*s2));

disp(a1,a2);

Y=(a2\*x+a1);

plot2d(x,Y)

plot2d(x,y,-2)

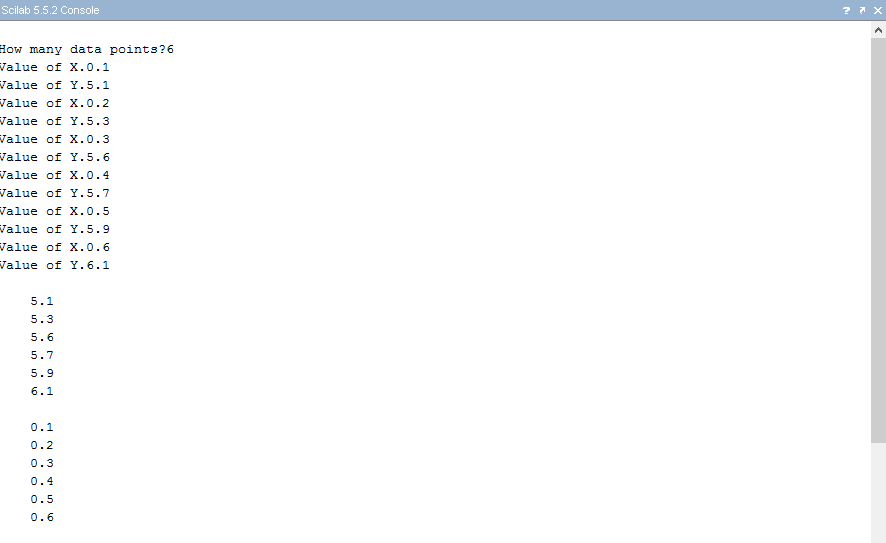
for i=1:a

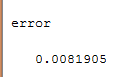
s=s +(y(i)-Y(i))^2

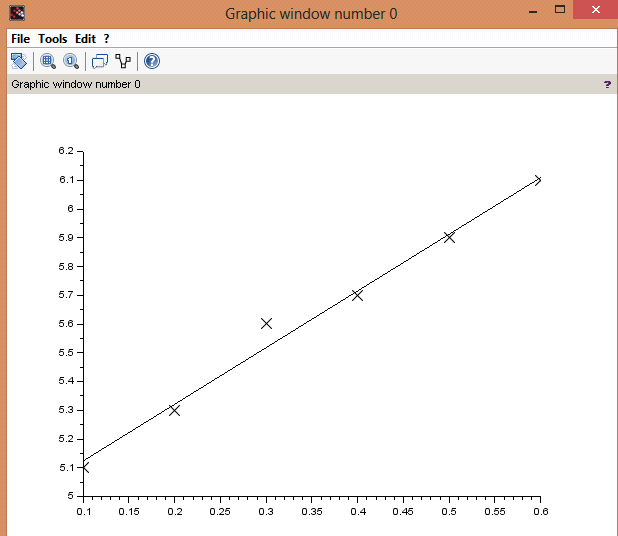
end

disp(s,"error=")

**OUTPUT:**

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