function [**e**]=curvefit1(**x**, **y**, **x0**)

[ry,cy]=size(**y**);

n=cy;

sx=sum(**x**);

sy=sum(**y**);

sxx=sum(**x**\***x**');

sxy=sum(**x**\***y**');

b=(sxy-sx\*sy/n)/(sxx-sx\*sx/n);

a=sy/n-b\*sx/n;

printf('Value of a=%g\t and value of b=%g\n',a,b);

printf('The estimated equation is y=%g+%gx\n',a,b);

**e**=a+b\***x0**;

printf('The estimated value when x0=%g then est=%g\n',**x0**,**e**);

endfunction

output:

--> x=[1,2,3,4,5,6];

-->y=[2,4,3,6,8,9];

-->x0=2;

-->curvefit1(x,y,x0)

Value of a=0.333333 and value of b=1.42857

The estimated equation is y=0.333333+1.42857x

The estimated value when x0=2 then est=3.19048

ans =

3.1904762