%% HW1

x0 = [0 10]; % initial interval

gfun=@(a,b,c) (fzero(@(x) (a\*(x.^2)+b\*x+c ),x0));

a=gfun(1,2,-10)

%% HW2

c = 10;

mygrid = @(x,y) ndgrid((-x:x/c:x),(-y:y/c:y));

[x,y] = mygrid(5,5);

z=sqrt(x.^2+y.^2);

mesh(x,y,z)

%% HW3

close all; clear all;

load score\_data % input N score

N=input(' number of student: ');

score=zeros(2,N);

% input the name and score of the student evaluate the average score

for i=1:N

str1= input('student name:','s');

eval(['name',int2str(i),'=str1;']);

% if (i==1)

% name=str1;

% else

% name=char(name,str1); % Create a character array.

% end

score(1,i)=input('math score: ');

score(2,i)=input('english score: ');

% previous parts contains in the main problem

% the subprogram to calculate the avg, max min for each courses

avg(i)=(score(1,i)+score(2,i))/2; % avg(i) = sum(score(:,i))/2;

end

% output value

for i=1:N

eval(['str1=name',int2str(i),';']);

fprintf('the average score of %s is %3.2f \n',str1,avg(i));

end

save score\_data N score