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```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% ENGR 132
% Program Description
%As a recruiter for a large corporation participating in Purdue
  Industrial
%Roundtable, you are surveying students and collecting data on their
  GPA
%and preferred engineering discipline to answer questions about each
%student.
%
% Assignment Information
%   Assignment:      PS 02, Problem 1
%   Author:         Ethan Hotson, ehotson@purdue.edu
%   Team ID:        N/A
%   Contributor:    N/A
%   My contributor(s) helped me:
%       [ ] understand the assignment expectations without
%           telling me how they will approach it.
%       [ ] understand different ways to think about a solution
%           without helping me plan my solution.
%       [ ] think through the meaning of a specific error or
%           bug present in my code without looking at my code.
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

INITIALIZATION

```
surveyData=csvread('Data_PES_survey_record.csv',1,0);%Reads the data
given by the survey, removing the first line of headings
```

CALCULATIONS

```
noInterest=surveyData==0;%finds students who didn't show interest in a
major, converted into a matrix
```

```

chooseNone=sum(noInterest,2); %finds which students showed no interest
    in any major

nonePicked=find(noSchool==1);%Determines the rows of these students

numNone=numel(nonePicked);%Counts the students who showed no interest
    in all majors

noSchool=chooseNone==3; %determines whether each student showed no
    interest in any school or not

oneSchool=find(chooseNone==2);%Finds which students only showed
    interest in one school

numOne=numel(oneSchool);%Counts the students who only showed interest
    in one school

allSchool=chooseNone==0;%Finds the number of students who showed
    interest in all schools

oneInterest=find(oneSchool==1);%Finds the number of students who only
    showed interest in one school

eceCE=find((surveyData(:,2)~=0)&(surveyData(:,4)~=0)&(surveyData(:,3)==0));%Finds
    the number of students who showed interest in ECE and CE

eceCEmin=min(surveyData(eceCE,5));%Finds the minimum GPA of those who
    showed interest in ECE and CE

idAllInterest=surveyData(allSchool,1);%Finds the IDs of those who
    showed interest in all schools

celME3=find((surveyData(:,4)==1)&(surveyData(:,3)==3));%Finds the
    students who had CE as 1st choice and ME as 3rd

numCE1ME3=numel(celME3);%Finds how many students had CE as 1st choice
    and ME as 3rd

inteECE=find(surveyData(:,2)~=0);%Finds students who showed interest in
    ECE

numIntECE=numel(intECE);%Counts how many students showed interest in
    ECE

avgIntECE=(sum(surveyData(intECE,2))/numIntECE);%Finds the average
    interest level shown by those who were interested in ECE

eceME35=find((surveyData(:,5)>=3.5)&((surveyData(:,2)==1)|
(surveyData(:,3)==1)));%Finds the students who had a GPA higher than
    3.5
%who were put either ECE or ME as their first choice.

numEceMe=numel(eceME35);%Finds the number of these students there were

```

```
avgEceMe=sum(surveyData(eceME35,5))/numEceMe; %Finds the average GPA
of these students
```

```
Undefined function or variable 'noSchool'.
```

```
Error in PS02_PES_ehotson (line 36)
```

```
nonePicked=find(noSchool==1);%Determines the rows of these students
```

FORMATTED TEXT DISPLAYS

```
%Prints answer to Question A
```

```
fprintf('A. Row indices of students who selected no school:\n')
disp(nonePicked)
```

```
%Prints answer to Question B
```

```
fprintf('B. Number of students who selected no school: %.0f
\n',numNone)
```

```
%Prints answer to Question C
```

```
fprintf('C. Number of students interested in only one school: %.0f
\n',numOne)
```

```
%Prints answer to Question D
```

```
fprintf('D. Minimum GPA of students who had interest in ECE and CE,
but not ME: %.2f\n',eceCEmin)
```

```
%Prints answer to Question E
```

```
fprintf('E. Survey IDs of students who showed interest in all
schools:')
disp(idAllInterest)
```

```
%Prints answer to Question F
```

```
fprintf('F. Number of students who first choice was CE and third
choice was ME: %.0f\n',numCE1ME3)
```

```
%Prints answer to Question G
```

```
fprintf('G. Average interest in ECE: %.4f\n',avgIntECE)
```

```
%Prints answer to Question H
```

```
fprintf('H. Average GPA of GPA>3.5 students who chose ECE or ME: %.2f
\n',avgEceMe)
```

ACADEMIC INTEGRITY STATEMENT

I have not used source code obtained from any other unauthorized source, either modified or unmodified. Neither have I provided access to my code to another. The code I am submitting is my own original work.

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