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# Table of Contents

.....	1
INITIALIZATION .....	1
CALCULATIONS .....	1
FORMATTED TEXT DISPLAYS .....	3
ACADEMIC INTEGRITY STATEMENT .....	3

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
% 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.  
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
%
```

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## 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
```

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```

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

intECE=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

```

---

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```
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)
```

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## 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.

