Group 15

ENG 220

Professor Jordan

September 26, 2024

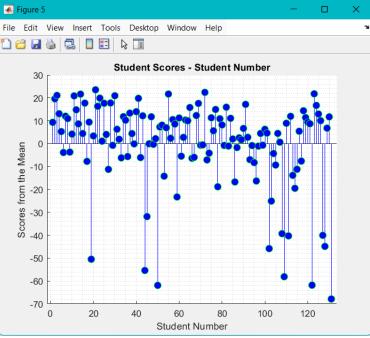
Class 2 Assignment



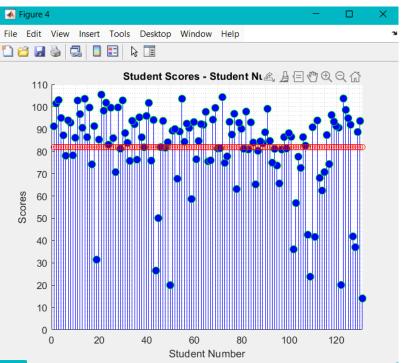
Original 9a code outputs

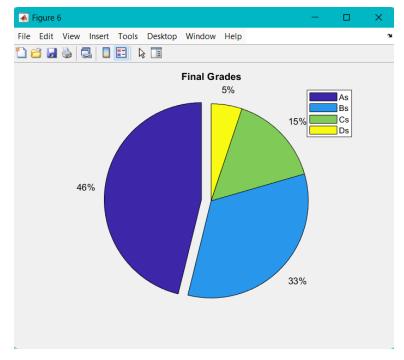
Displays students grades with the average highlighted ->

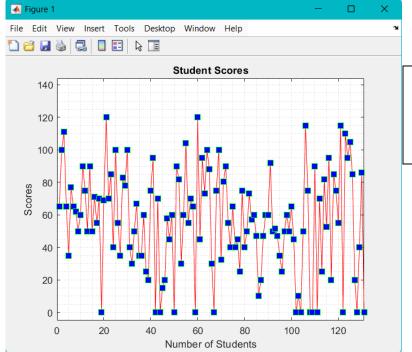
Displays the student scores around the mean



Pie chart of the letter grades from students

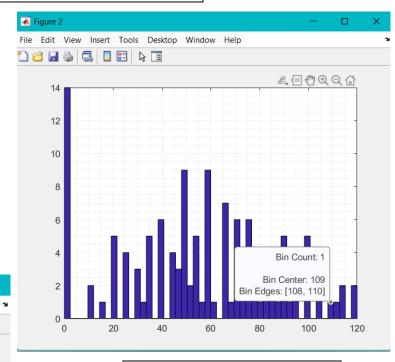






Modified 9a code outputs

<- Details the overall scores for all students with the modified code to only represent column 11



^ Details the grading curve of all students with the modified code to only represent column 11



<- Displays the scores in ascending order with the modified code to only represent column 11

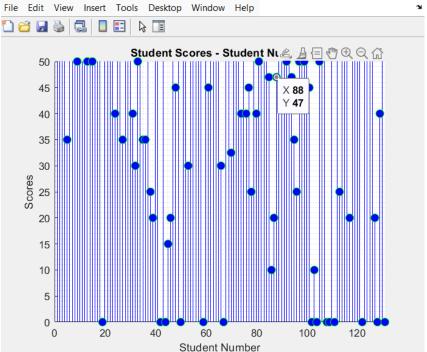
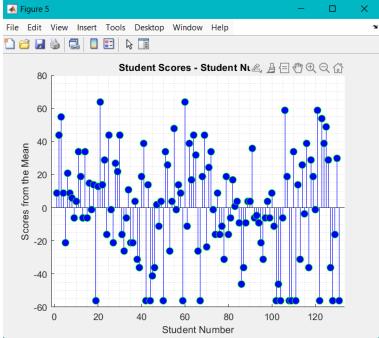


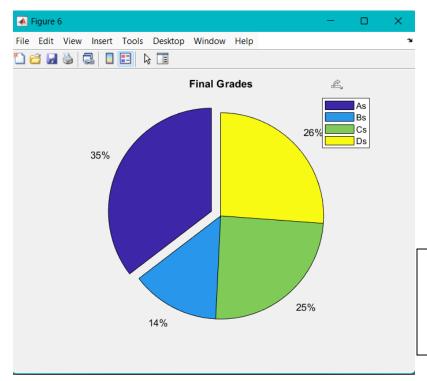
Figure 4

Modified 9a code outputs

< Displays students grades with the average highlighted with the modified code to only represent column 11

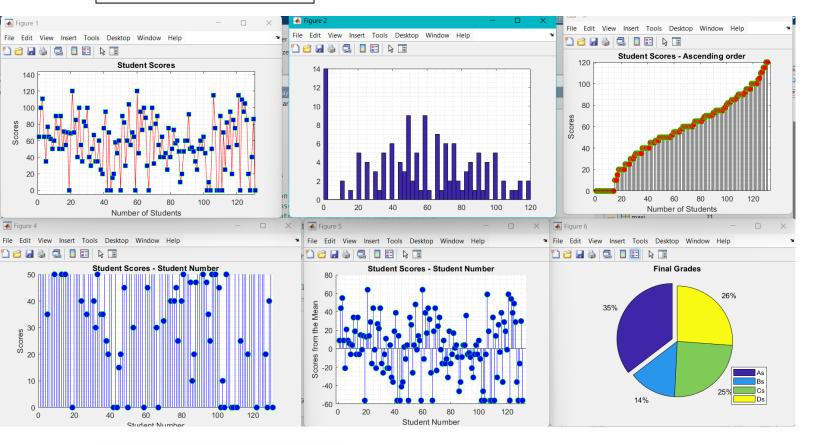


^ Displays the student scores around the mean with the modified code to only represent column 11



< Pie chart of the letter grades from students with the modified code to only represent column 11

Modified 9b code outputs



Modified 9b to only take the final scores from column 11 and represent the data to show the average, the mean, the pie chart of final grades, and the standard deviation.

9a code sample

```
Editor - C:\Users\Morgan\Downloads\arrays_final_scores_9a_1.m
   arrays_final_scores_9a_1.m × read_excel_file_process_scores.m × +
 11
           % - with your mouse select all rows and columns of data
 12
           % - then go to Output Type and select Numeric Matrix
 13
           % - lastly, click on Import Selection button
 14
           % - then in Workspace click on finalscoresexample matrix to display the data
 15
 16
           % open in Workspace the matrix finalscoresexample and by hand
           % change NaN with the number 0
 17
 18
           % save new data to disk "newdatafile"
 19
 20
           % get size of matrix
 21
 22
           save newdatafile finalscoresexample
 23
           size (finalscoresexample)
 24
 25
           % read file newdatafile.mat
 26
           %load newdatafile
 27
 28
           disp('>>> END of arrays_scores_9a.m <<<')</pre>
 29
Command Window
```

9b code sample

```
128
           ss60 = (col11>=60 & col11<70);
129
           DS = length(s60_70)
130
           S60 = ss60 .* col11;
131
132
           % for 2D matrices
133
134
           %[i90,j90] = find(col11>90);
135
           %[i80,j80] = find(col11>80 & col11<90);
           %[i70,j70] = find(col11>70 & col11<80);
136
137
           %[i60,j60] = find(col11>60 & col11<70);
138
139
           figure(6)
140
           data = [AS BS CS DS];
141
           explode = [1 0 0 0 ];
142
           pie(data, explode);
143
           title('Final Grades');
144
           legend('As', 'Bs', 'Cs', 'Ds', 'Location', 'Best');
145
146
           disp('>>> END of arrays final scores 9b.m <<<')</pre>
147
```

ans =

131

11

Command Window

18 DS =