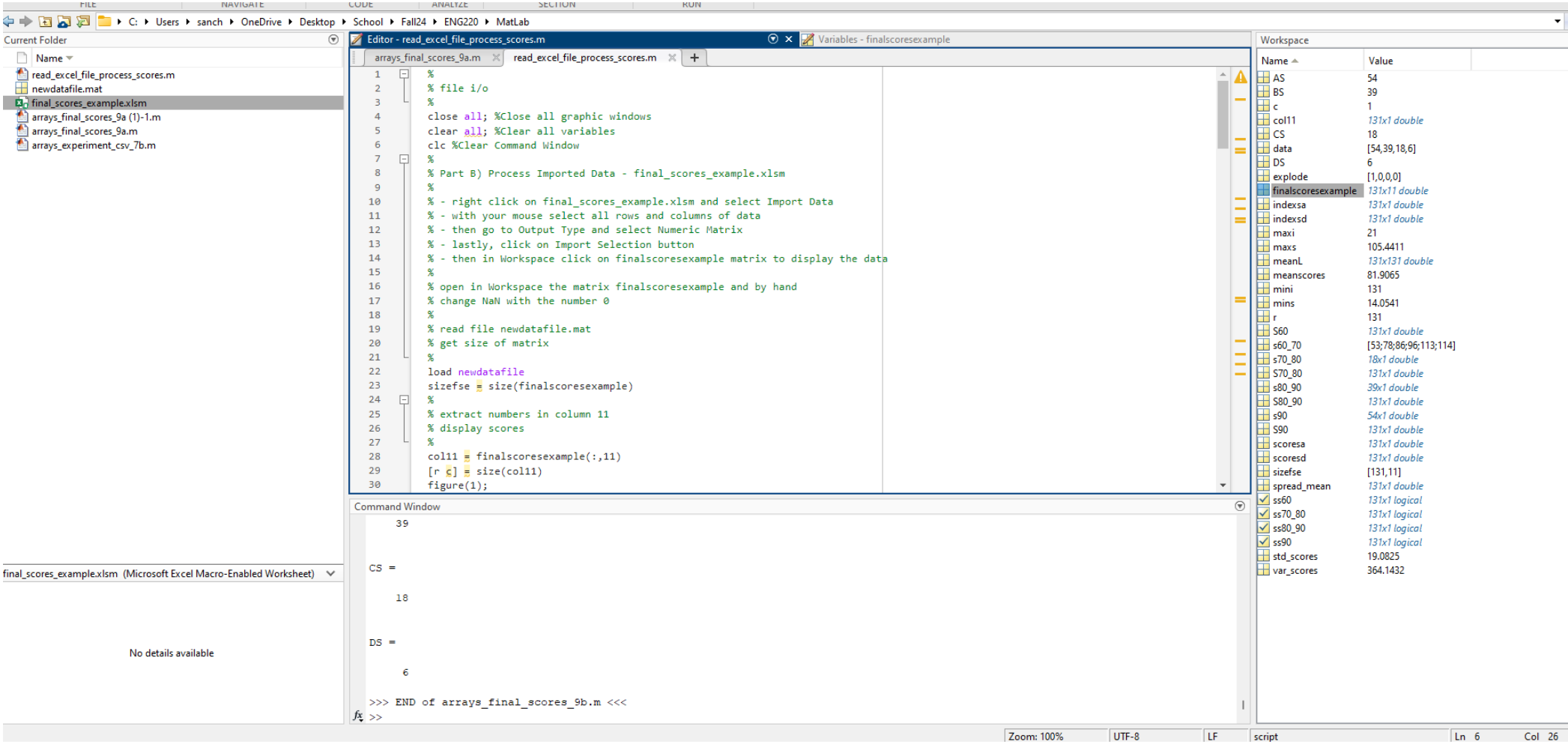
9A) Code


C: ▸ Users ▸ sanch ▸ OneDrive ▸ Desktop ▸ School ▸ Fall24 ▸ ENG220 ▸ MatLab
Current Folder
Name
read_excel_file_process_scores.m
newdatafile.mat
final_scores_example.xlsm
arrays_final_scores_9a (1)-1.m
arrays_final_scores_9a.m
arrays_experiment_csv_7b.m
final_scores_example.xlsm (Microsoft Excel Macro-Enabled Worksheet)
No details available
Editor - read_excel_file_process_scores.m
Variables - finalscoresexample
arrays_final_scores_9a.m
read_excel_file_process_scores.m
1 %
2 % file i/o
3 %
4 close all; %Close all graphic windows
5 clear all; %Clear all variables
6 clc %Clear Command Window
7 %
8 % Part B) Process Imported Data - final_scores_example.xlsm
9 %
10 % - right click on final_scores_example.xlsm and select Import Data
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
17 % change NaN with the number 0
18 %
19 % read file newdatafile.mat
20 % get size of matrix
21 %
22 load newdatafile
23 sizefse = size(finalscoresexample)
24 %
25 % extract numbers in column 11
26 % display scores
27 %
28 col11 = finalscoresexample(:,11)
29 [r c] = size(col11)
30 figure(1);
Command Window
39
CS =
18
DS =
6
>>> END of arrays_final_scores_9b.m <<<
>>
Workspace
Name
Value
AS 54
BS 39
c 1
col11 131x1 double
CS 18
data [54,39,18,6]
DS 6
explode [1,0,0,0]
finalscoresexample 131x11 double
indexsa 131x1 double
indexsd 131x1 double
maxi 21
maxs 105.4411
meanL 131x131 double
meanscores 81.9065
mini 131
mins 14.0541
r 131
S60 131x1 double
s60_70 [53;78;86;96;113;114]
s70_80 18x1 double
S70_80 131x1 double
s80_90 39x1 double
S80_90 131x1 double
s90 54x1 double
S90 131x1 double
scoresa 131x1 double
scoresd 131x1 double
sizefse [131,11]
spread_mean 131x1 double
ss60 131x1 logical
ss70_80 131x1 logical
ss80_90 131x1 logical
ss90 131x1 logical
std_scores 19.0825
var_scores 364.1432
Zoom: 100%
UTF-8
LF
script
Ln 6
Col 26

9A) Figures

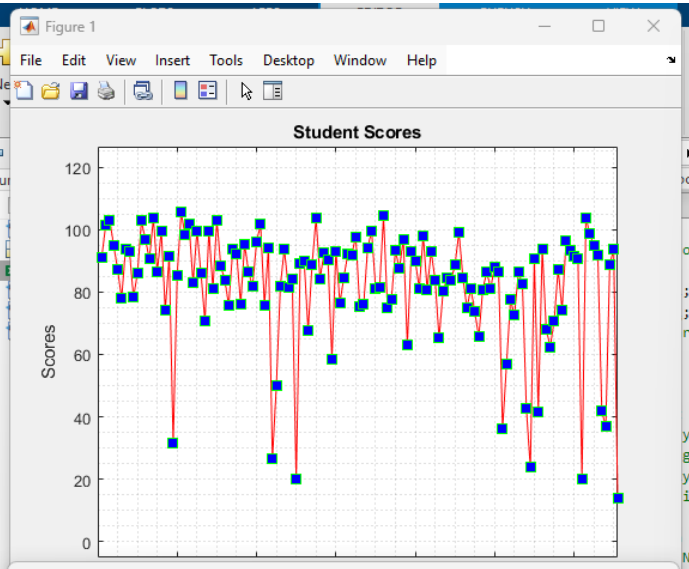


Figure 1
File Edit View Insert Tools Desktop Window Help
Student Scores
Scores

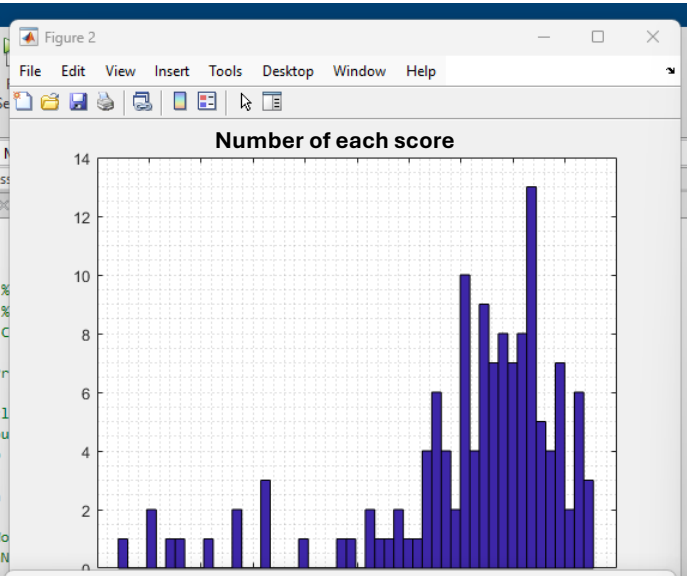


Figure 2
File Edit View Insert Tools Desktop Window Help
Number of each score


Figure 3
File Edit View Insert Tools Desktop Window Help
Student Scores - Ascending order
X 104
Y 94.2141
Scores

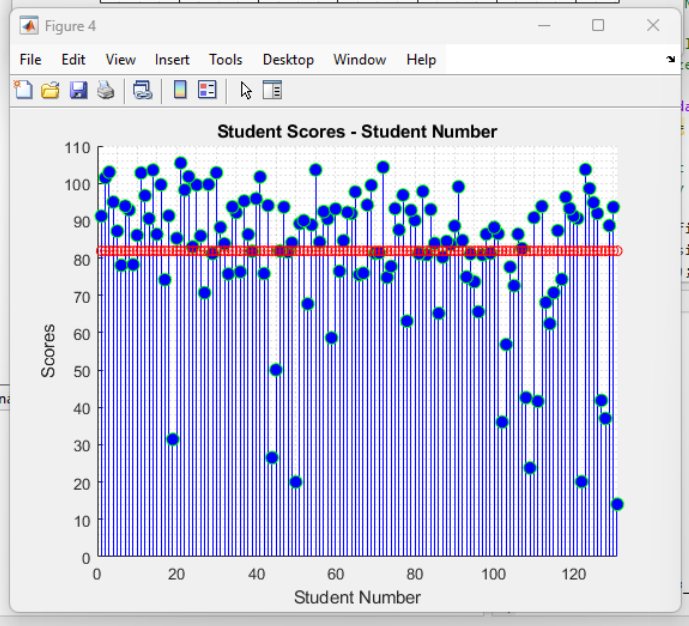


Figure 4
File Edit View Insert Tools Desktop Window Help
Student Scores - Student Number
Scores
Student Number

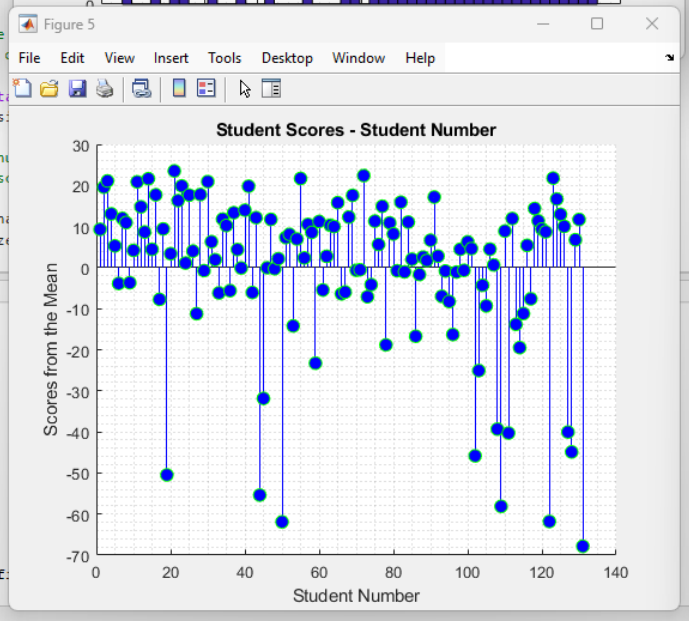


Figure 5
File Edit View Insert Tools Desktop Window Help
Student Scores - Student Number
Scores from the Mean
Student Number

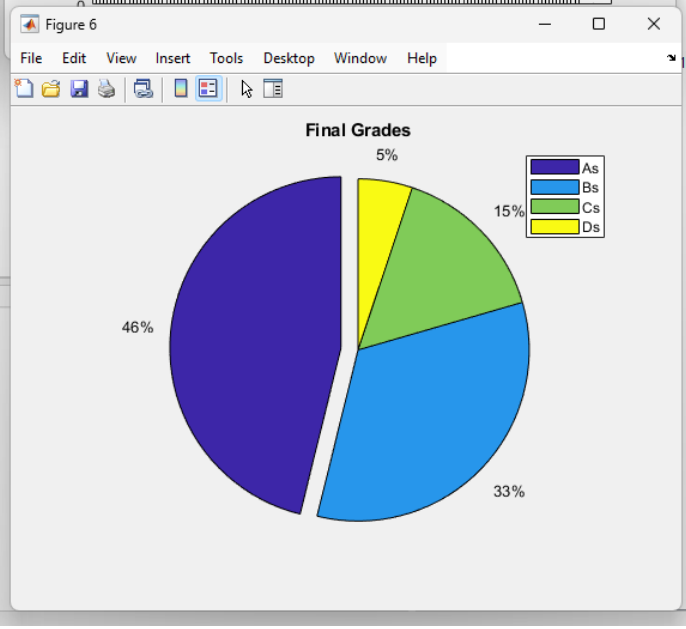
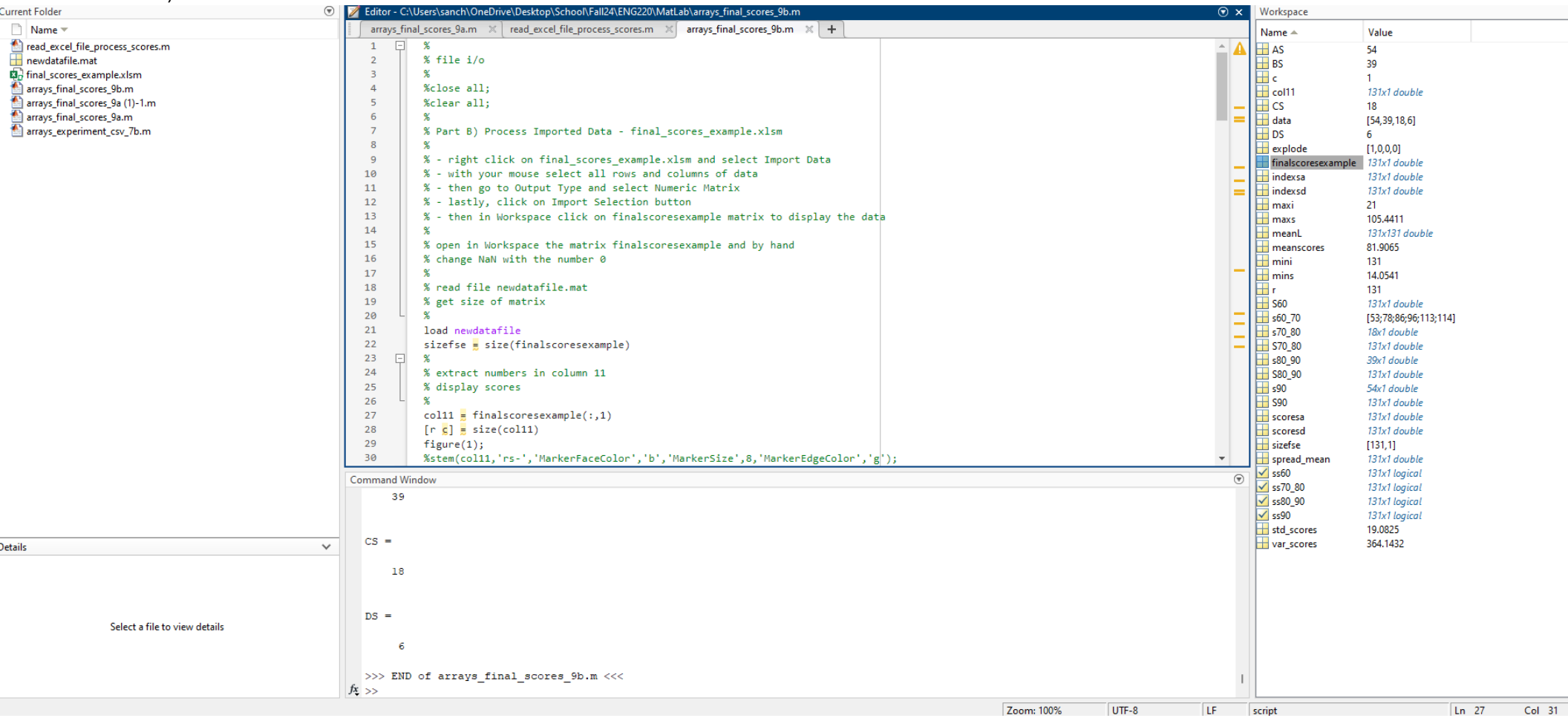


Figure 6
File Edit View Insert Tools Desktop Window Help
Final Grades
5%
15%
46%
33%
As
Bs
Cs
Ds

9B) Code


Current Folder
Name
read_excel_file_process_scores.m
newdatafile.mat
final_scores_example.xlsm
arrays_final_scores_9b.m
arrays_final_scores_9a (1)-1.m
arrays_final_scores_9a.m
arrays_experiment_csv_7b.m
Details
Select a file to view details
Editor - C:\Users\sanch\OneDrive\Desktop\School\Fall24\ENG220\MatLab\arrays_final_scores_9b.m
arrays_final_scores_9a.m
read_excel_file_process_scores.m
arrays_final_scores_9b.m
% file i/o
%close all;
%clear all;
% Part B) Process Imported Data - final_scores_example.xlsm
% - right click on final_scores_example.xlsm and select Import Data
% - with your mouse select all rows and columns of data
% - then go to Output Type and select Numeric Matrix
% - lastly, click on Import Selection button
% - then in Workspace click on finalscoresexample matrix to display the data
% open in Workspace the matrix finalscoresexample and by hand
% change NaN with the number 0
% read file newdatafile.mat
% get size of matrix
load newdatafile
sizefse = size(finalscoresexample)
% extract numbers in column 11
% display scores
col11 = finalscoresexample(:,1)
[r c] = size(col11)
figure(1);
%stem(col11,'rs-','MarkerFaceColor','b','MarkerSize',8,'MarkerEdgeColor','g');
Command Window
39
CS =
18
DS =
6
>>> END of arrays_final_scores_9b.m <<<
>>
Workspace
Name
Value
AS 54
BS 39
c 1
col11 131x1 double
CS 18
data [54,39,18,6]
DS 6
explode [1,0,0,0]
finalscoresexample 131x1 double
indexsa 131x1 double
indexsd 131x1 double
maxi 21
maxs 105.4411
meanL 131x131 double
meanscores 81.9065
mini 131
mins 14.0541
r 131
S60 131x1 double
s60_70 [53;78;86;96;113;114]
s70_80 18x1 double
S70_80 131x1 double
s80_90 39x1 double
S80_90 131x1 double
s90 54x1 double
S90 131x1 double
scoresa 131x1 double
scoresd 131x1 double
sizefse [131,1]
spread_mean 131x1 double
ss60 131x1 logical
ss70_80 131x1 logical
ss80_90 131x1 logical
ss90 131x1 logical
std_scores 19.0825
var_scores 364.1432
Zoom: 100%
UTF-8
LF
script
Ln 27
Col 31

9B) Figures

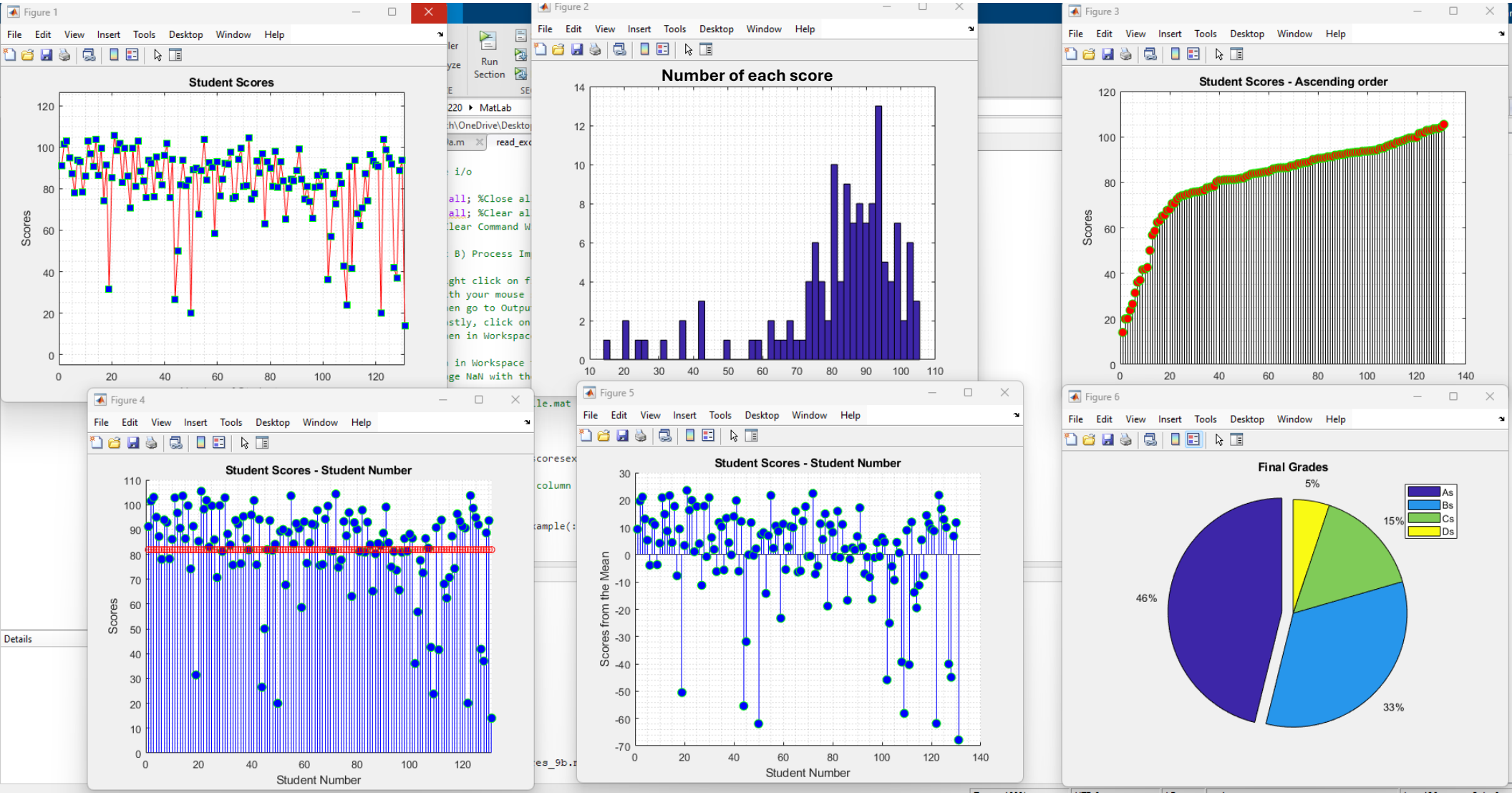


Figure 1
File Edit View Insert Tools Desktop Window Help
Student Scores
Scores
Figure 2
Number of each score
Figure 3
Student Scores - Ascending order
Scores
Figure 4
Student Scores - Student Number
Scores
Student Number
Figure 5
Student Scores - Student Number
Scores from the Mean
Student Number
Figure 6
Final Grades
As
Bs
Cs
Ds
5%
15%
46%
33%