COMPUTER ASSIGNMENT EVALUATION

Statistics 135, Spring '03

Please answer the following questions thoughtfully and constructively. Your input will be considered in the in future design decisions.

Screen shots of each of the computer exercises appear interspersed throughout the evaluation form. They are there to help you remember the graphical user interfaces (GUIs), and to allow you to write comments on them.

Thank you for taking the time to complete this survey.

THIS EVALUATION MUST BE HANDED IN BY NOON ON WEDNESDAY MAY 21 IN ORDER TO RECEIVE CREDIT. YOU MAY EITHER HAND IT DIRECTLY TO ME (PROFESSOR NOLAN) OR YOU MAY WRITE YOUR NAME ON IT AND PLACE IT UNDER MY OFFICE DOOR (395 EVANS).

The Sampler GUI

What did you think was the main point of this computing exercise?

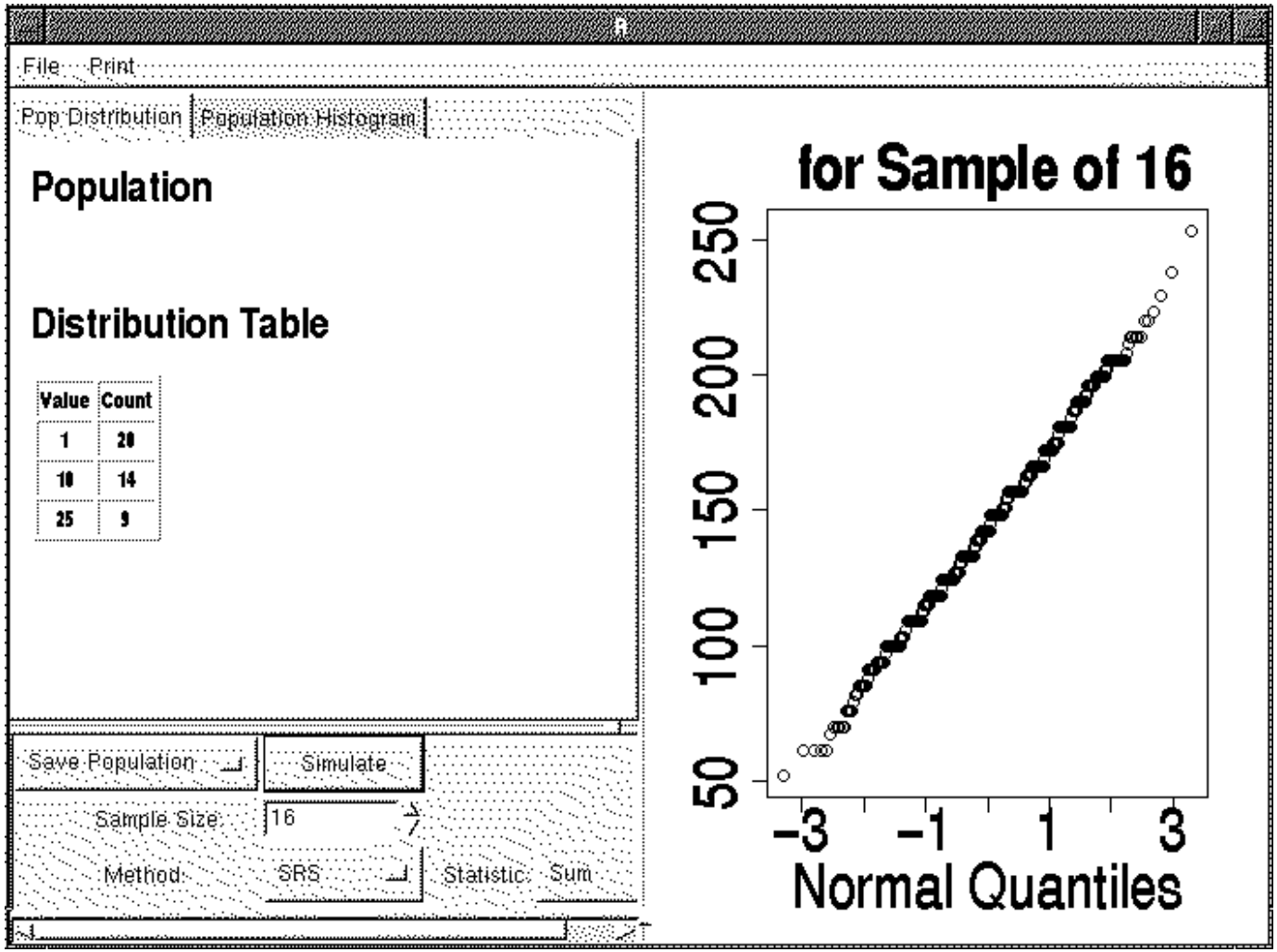
What statistical lesson did you learn from the using the GUI?

Please compare the computing exercise to the material presented in the book and lecture. How were they similar/different?

What features of the sampler GUI did you find were easy to use?

What did you find confusing or frustrating about the exercise?

Please give ideas that you have for improving the interface.


R
File Print
Pop Distribution
Population Histogram
Population
Distribution Table
Value Count
1 20
10 14
25 9
Save Population
Simulate
Sample Size
16
Method
SRS
Statistic
Sum
for Sample of 16
50
100
150
200
250
−3
−1
1
3
Normal Quantiles

The Experimental Design GUI

What did you think was the main point of this computing exercise?

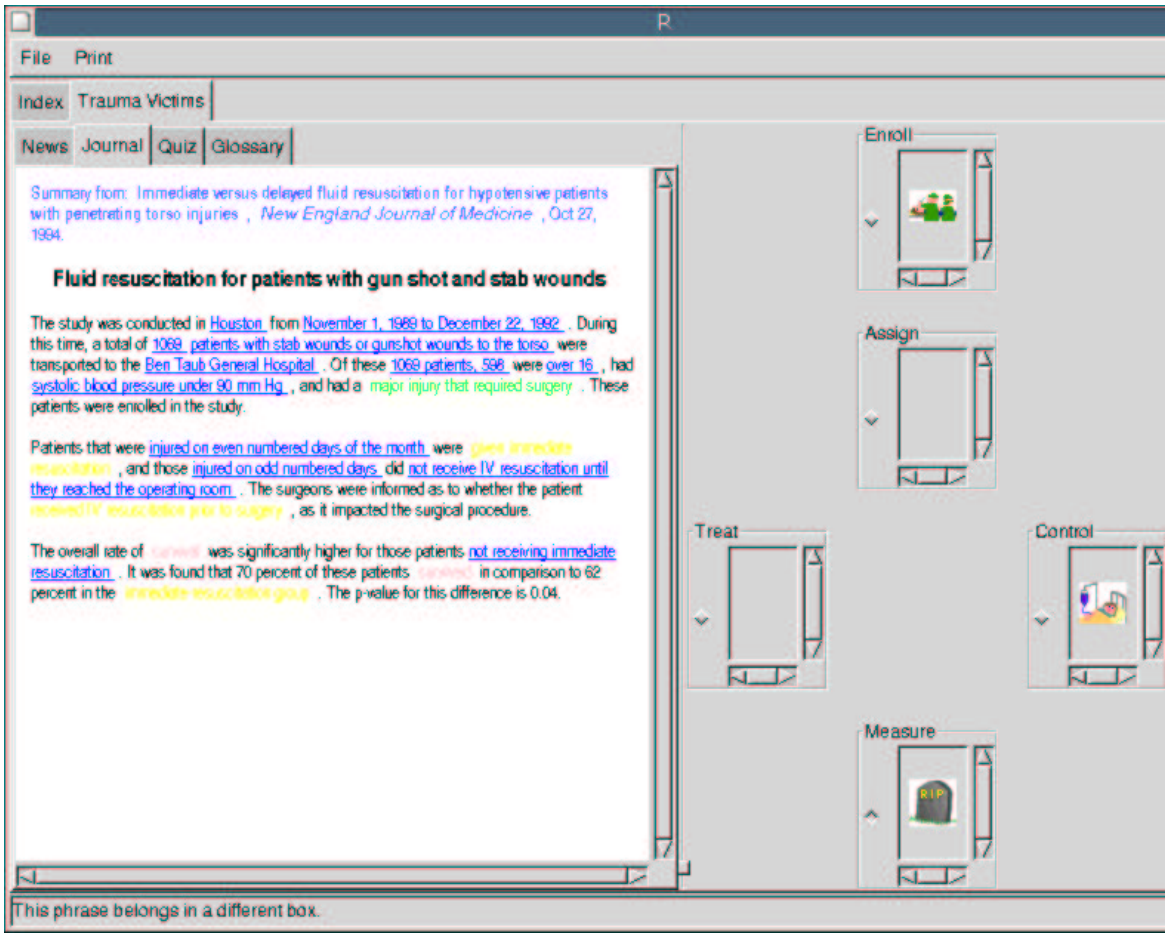
What statistical lesson did you learn from the using the GUI?

Please compare this computing exercise to the material presented in the book and lecture. How were they similar/different?

What features of the GUI did you find were easy to use?

What did you find confusing or frustrating about the exercise?

Please give ideas that you have for improving the interface.


R
File
Print
Index
Trauma Victims
News
Journal
Quiz
Glossary
Summary from: Immediate versus delayed fluid resuscitation for hypotensive patients with penetrating torso injuries , New England Journal of Medicine , Oct 27, 1994.
Fluid resuscitation for patients with gun shot and stab wounds
The study was conducted in Houston from November 1, 1989 to December 22, 1992 . During this time, a total of 1069 patients with stab wounds or gunshot wounds to the torso were transported to the Ben Taub General Hospital . Of these 1069 patients, 598 were over 16 , had systolic blood pressure under 90 mm Hg , and had a major injury that required surgery . These patients were enrolled in the study.
Patients that were injured on even numbered days of the month were , and those injured on odd numbered days did not receive IV resuscitation until they reached the operating room . The surgeons were informed as to whether the patient , as it impacted the surgical procedure.
The overall rate of was significantly higher for those patients not receiving immediate resuscitation . It was found that 70 percent of these patients in comparison to 62 percent in the . The p-value for this difference is 0.04.
Enroll
Assign
Treat
Control
Measure
RIP
This phrase belongs in a different box.

The simple regression GUI

What did you think was the main point of this computing exercise?

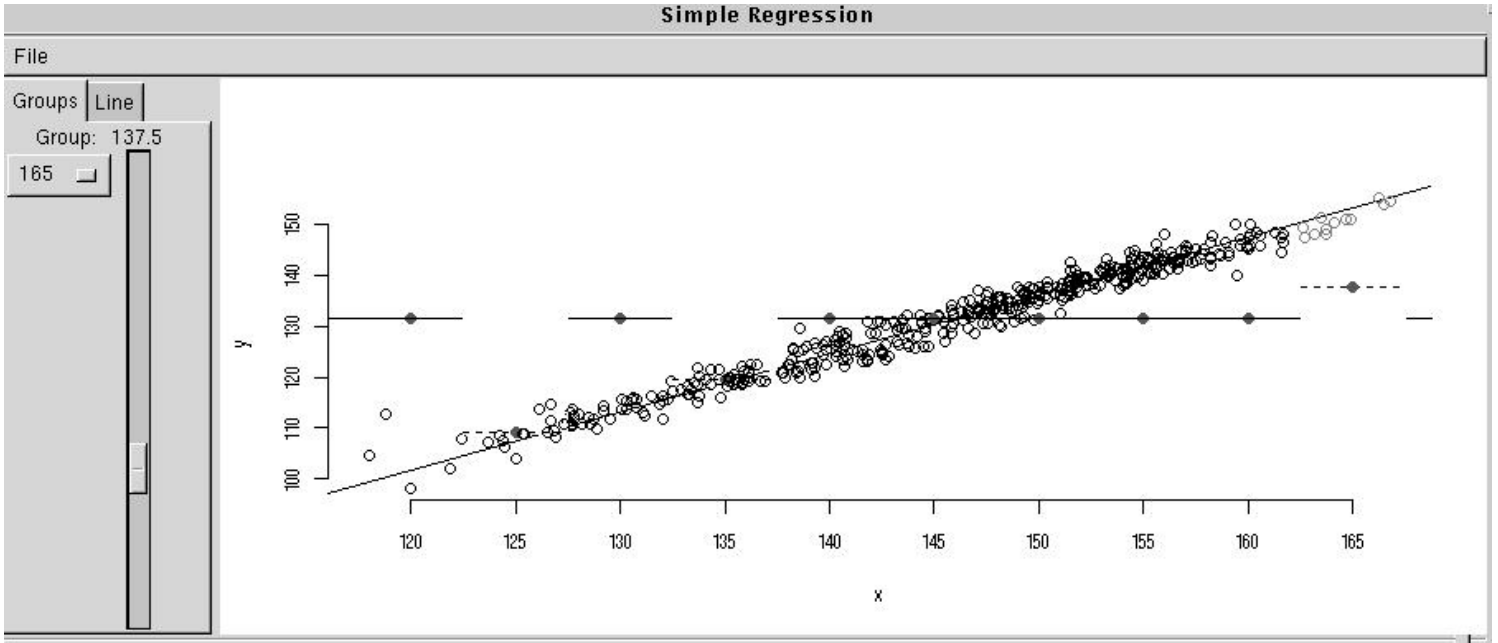
What statistical lesson did you learn from the using the GUI?

Please compare this computing exercise to the material presented in the book and lecture. How were they similar/different?

What features of the GUI did you find were easy to use?

What did you find confusing or frustrating about the exercise?

Please give ideas that you have for improving the interface.



	120	125	130	135	140	145	150	155	160	165	Total	Average	Root Mea
Group Estimate	131.41	109.3	131.41	119.4	131.41	131.41	131.41	131.41	131.41	137.5			
Within Group Deviations	4127.53	102.49	11853.11	137.3	2998.19	672.48	2745.05	9670.47	7073.23	2168.09	41547.94	93.58	9.67
Deviations About line	216.1	78.45	87.78	106.45	329.12	295.82	310.31	235.16	175.13	55.4	1889.71	4.18	2.04
Deviations About Mean	4127.53	7005.22	11853.11	6072.45	2998.19	672.48	2745.05	9670.47	7073.23	4542.7	56760.42	125.3	11.19

The Radon Map

In this exercise, you were to compute county percentages via a spreadsheet and import them into the colorMap GUI. You also were to compute a state estimate and confidence interval.

Did you find that using the spreadsheet reinforced the statistical concepts behind stratified sampling or not? Please explain.

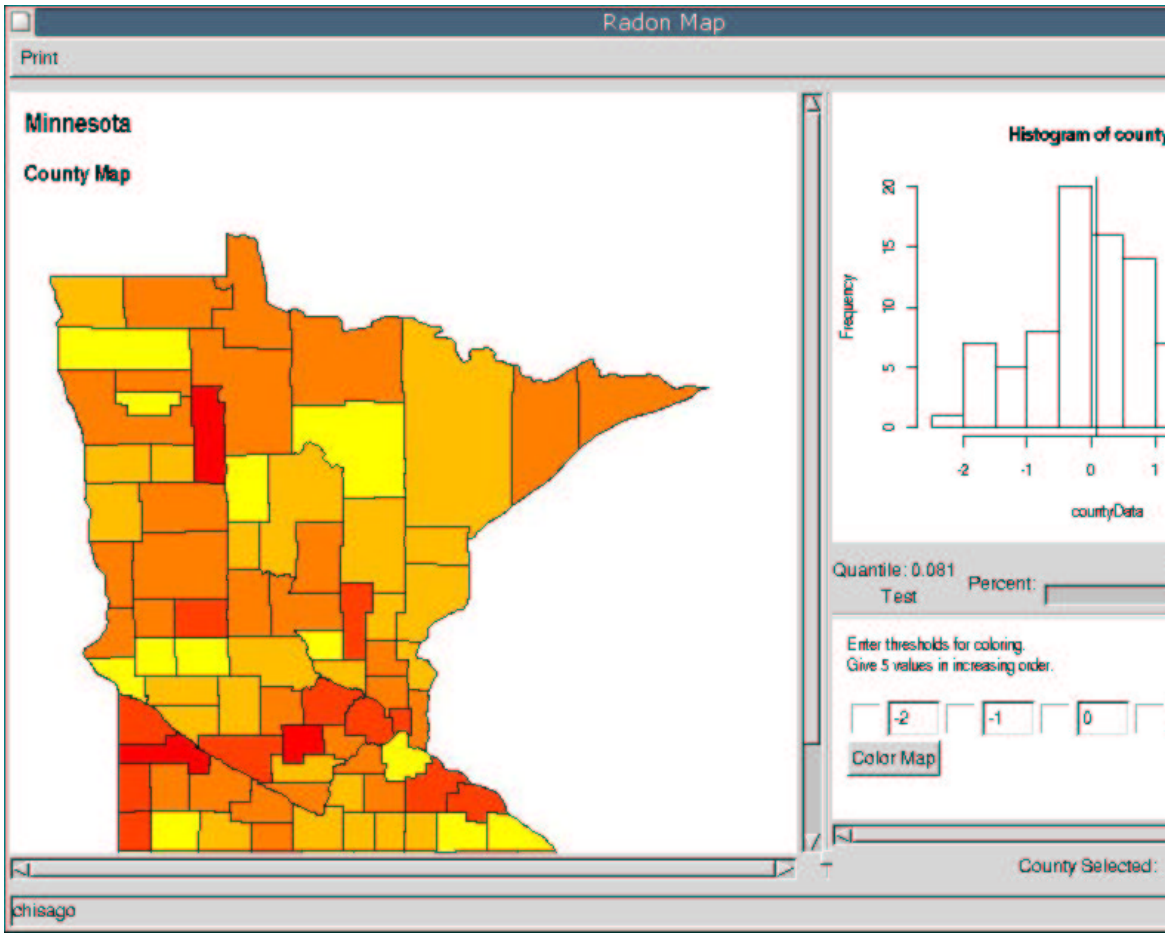
Did you find the spreadsheet computations easy to make?

What did you find confusing or frustrating about the spreadsheet calculations?

What features of the colorMap GUI did you find were easy to use?

What did you find confusing or frustrating about the colorMap GUI?

Please give ideas that you have for improving the interface.


Radon Map
Print
Minnesota
County Map
Histogram of county
Frequency
0
5
10
15
20
-2
-1
0
1
countyData
Quantile: 0.081
Test
Percent:
Enter thresholds for coloring.
Give 5 values in increasing order.
-2
-1
0
Color Map
County Selected:
chisago

The DNA pattern GUI

In this exercise, you were to compute chi-square tests for the uniform and Poisson distributions via a spreadsheet. You also were to analyze the locations and gaps of the palindromes via special graphics such as the sliding bin plot and exponential quantile plots.

Did you find that using the spreadsheet reinforced the statistical concepts behind goodness-of-fit tests or not? Please explain.

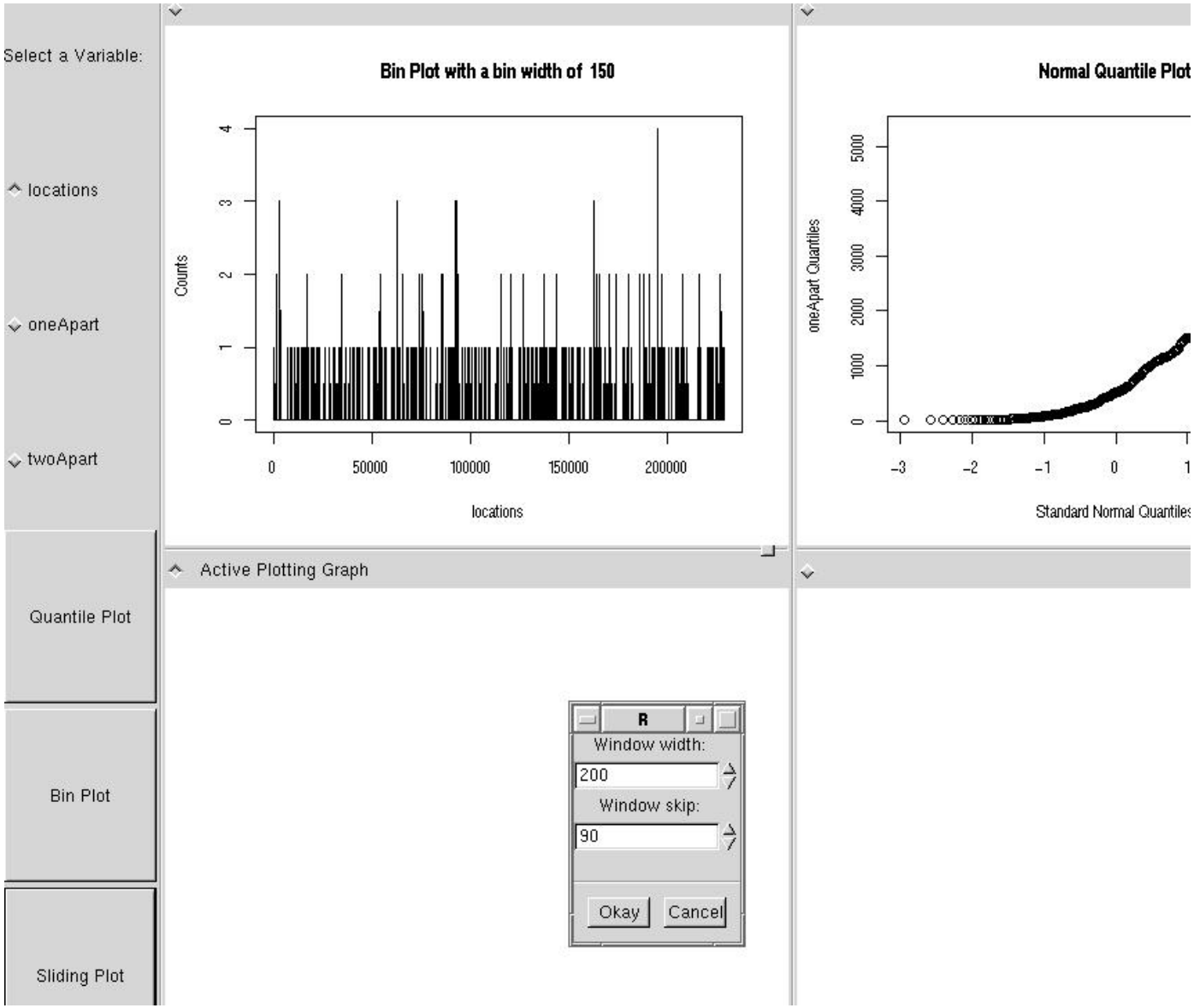
Did you find the spreadsheet computations easy to make?

What did you find confusing or frustrating about the spreadsheet calculations?

What features of the graphing GUI did you find were easy to use?

What did you find confusing or frustrating about the graphing GUI?

Please give ideas that you have for improving the interface.


Select a Variable:
locations
oneApart
twoApart
Quantile Plot
Bin Plot
Sliding Plot
Bin Plot with a bin width of 150
Counts
locations
Normal Quantile Plot
oneApart Quantiles
Standard Normal Quantiles
Active Plotting Graph
R
Window width:
200
Window skip:
90
Okay
Cancel

The Data Analysis GUI

The data analysis GUI evolved over the course of the semester. It was used three times: to analyze birth weights of babies born to smokers and nonsmokers; to analyze premolt and postmolt size of crab shells; to analyze the snow gauge data.

Some features were added to the GUI and others were changed as the semester progressed.

1. For the birth weights, an instruction sheet appeared in the top right panel of the GUI. The instruction sheet did not appear the next two times the GUI was used. Did you find it was helpful to have it, or it did it not matter if it was there or not? What improvements to the sheet might have made it more useful?

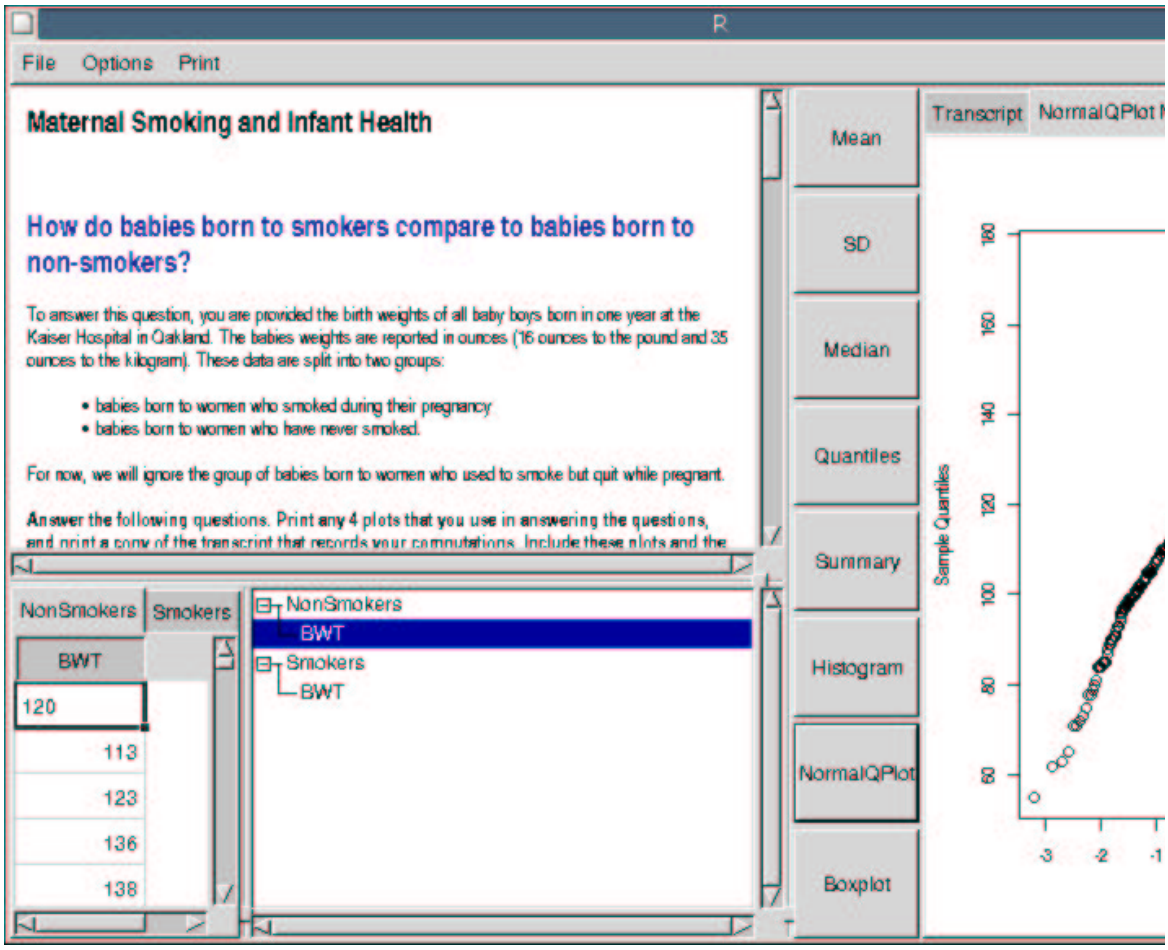
2. In the first lab, the transcript of numerical output appeared on top of the plots, and in the next two labs, it appeared next to the plots. Do you have a preference for where it should be located? Why?

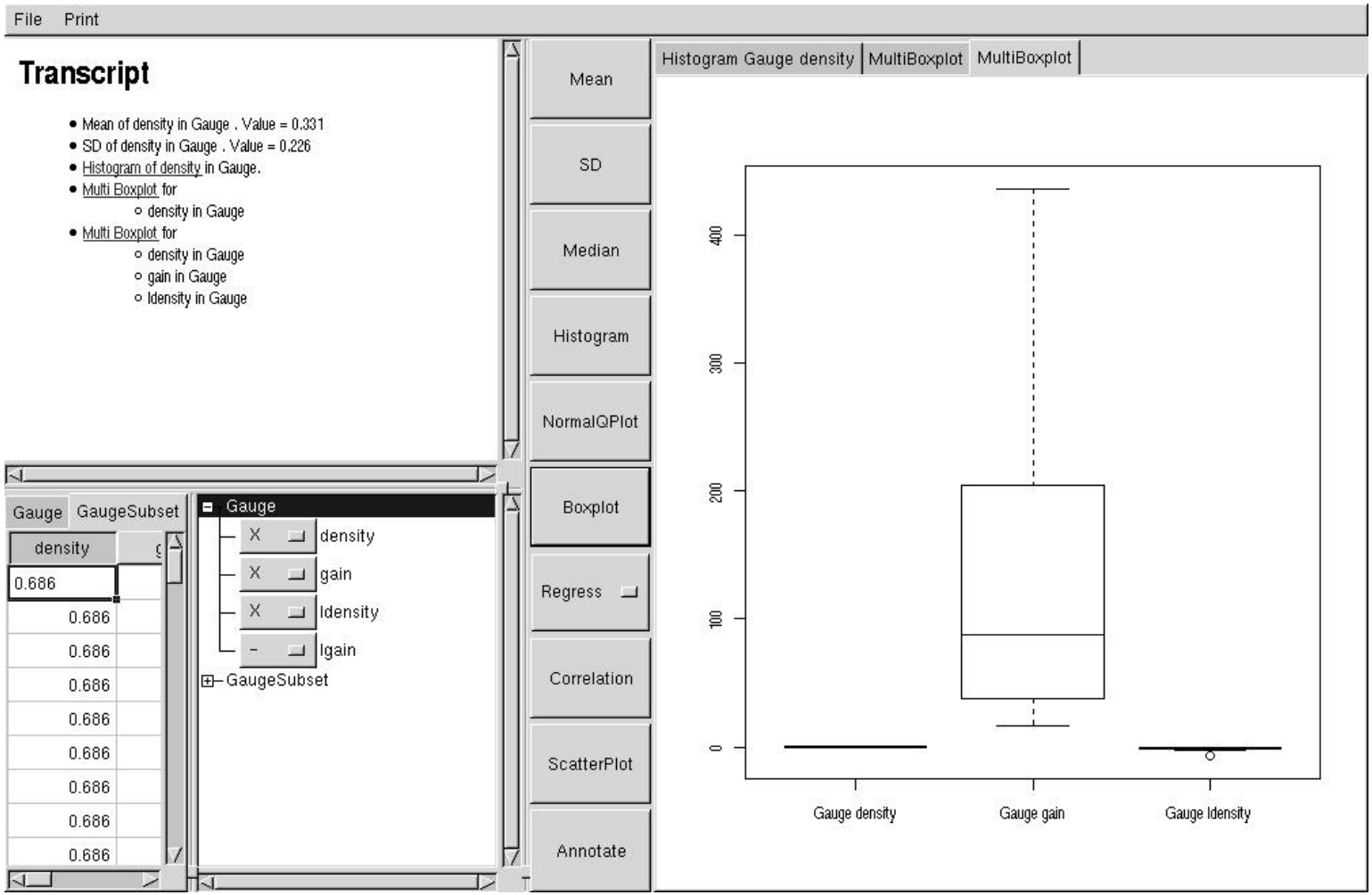
3. The DNA lab provided a table that you could fill with up to 4 plots. Would you prefer this interface to this one where you have one plot per page but an unlimited number of plots that can be made?

4. Please comment on the interface for choosing variables to be analyzed.

5. Please comment on the annotate plot feature where you can place a curve on a scatter plot. What other types of annotations would you like to have available?

6. Please comment on any other features of the GUI. What did you find useful, easy-to-use, confusing, not useful. What additional features would you like to have?


R
File Options Print
Maternal Smoking and Infant Health
How do babies born to smokers compare to babies born to non-smokers?
To answer this question, you are provided the birth weights of all baby boys born in one year at the Kaiser Hospital in Oakland. The babies weights are reported in ounces (16 ounces to the pound and 35 ounces to the kilogram). These data are split into two groups:
• babies born to women who smoked during their pregnancy
• babies born to women who have never smoked.
For now, we will ignore the group of babies born to women who used to smoke but quit while pregnant.
Answer the following questions. Print any 4 plots that you use in answering the questions,
Mean
SD
Median
Quantiles
Summary
Histogram
NormalQPlot
Boxplot
Transcript
NormalQPlot
Sample Quantiles
NonSmokers
Smokers
BWT
120
113
123
136
138
NonSmokers
BWT
Smokers
BWT


File
Print
Transcript
Mean of density in Gauge . Value = 0.331
SD of density in Gauge . Value = 0.226
Histogram of density in Gauge.
Multi Boxplot for
density in Gauge
Multi Boxplot for
density in Gauge
gain in Gauge
ldensity in Gauge
Mean
SD
Median
Histogram
NormalQPlot
Boxplot
Regress
Correlation
ScatterPlot
Annotate
Histogram Gauge density
MultiBoxplot
MultiBoxplot
Gauge
GaugeSubset
density
0.686
Gauge
X
density
X
gain
X
ldensity
-
lgain
GaugeSubset
0
100
200
300
400
Gauge density
Gauge gain
Gauge ldensity

Please provide any overall comments that you have on:

1) The use of case studies to teach mathematical statistics.

2) The use of computing in the mathematical statistics course to address statistical concepts such as the central limit theorem.

3) The use of the computer in the mathematical statistics course to apply the statistical concepts and analyze data.

4) Other Comments:

About you:

_____ Male _____ Female

_____ Years at Berkeley _____ Standing (i.e. junior, senior, graduate)

_____ Grade you expect in STAT 135

_____ Major

Describe your experience with the following software and operating systems. Use the scale

0 = Never used/ No experience

1 = Little experience

3 = Comfortable with the basics

5 = Proficient

Excel (spreadsheets)	0	1	2	3	4	5
Word	0	1	2	3	4	5
Unix	0	1	2	3	4	5
Microsoft windows	0	1	2	3	4	5
R or S-plus	0	1	2	3	4	5
Matlab	0	1	2	3	4	5
C/C++	0	1	2	3	4	5
HTML	0	1	2	3	4	5
JavaScript	0	1	2	3	4	5
Java	0	1	2	3	4	5

THANK YOU for completing this survey!!!