

Math 160/263 Minitab Assignment #1 - Unix Version

Chapter 0 - Introduction to Minitab

Worksheet Name - data1.MTW

The purpose of this assignment is to introduce you to the statistical software package, Minitab. You will learn how to enter, edit, and view data as well as open and save files.

1. To start Minitab, type `minitab` at the `>` prompt. When you see the `MTB >` prompt, you are in Minitab. At this prompt type,

OUTFile 'filename'

to open an *outfile*. (Note that the filename must be in single quotes and should not contain any periods or other special characters, spaces, or extensions.)

There are two critical commands in Minitab. Failure to use either one of these commands may unfortunately result in the loss of your work. The **OUTFile** command is the first “critical” command.

2. Use the **RETRieve** command to load the *worksheet* that contains the data for this assignment. NOTE: This and all future worksheets will be in `/xdisk/mendel`. This path name must be entered before the name of the worksheet. For example, you would use `/xdisk/mendel/data1.MTW` to specify the worksheet for this assignment.
3. Use the **INFORmation** command to list the contents of the *worksheet* and the **PRINt** command to display the data.
4. The data for the textbook used in Math 160 was omitted from the *worksheet*. Use the **INSErt** command to append columns 1 through 3 with the data given below.

| Textbook | Author | Price |
|---------------------------------------|--------|-------|
| The Basic Practice of Statistics, 2/E | Moore | 77.75 |

5. Use the **PRINt** command to display the revised data.

In order to conduct a thorough analysis of the prices of these books, it would be desirable to know the length of each book. This information is given below.

| Textbook | Pages |
|--|-------|
| A Brief Introduction to Probability and Statistics | 640 |
| Elementary Statistics, 5/E | 864 |
| Elementary Statistics, 8/E | 800 |
| Elementary Statistics: Picturing the World, 2/E | 704 |
| Exploring Statistics, 2/E | 940 |
| First Course in Statistics, A, 8/E | 576 |
| Introduction to Statistics | 752 |
| Introduction to the Practice of Statistics, 3/E | 828 |
| Introductory Statistics, 4/E | 880 |
| Introductory Statistics, 6/E | 984 |
| Learning Statistics with Real Data | 300 |
| Mind on Statistics | 592 |
| Statistics, 9/E | 880 |
| The Basic Practice of Statistics, 2/E | 619 |

6. Use the **NAME** command to assign the name 'Pages' to column 4, and use the **SET** command to input the number of pages for each book.
7. Use the **INFORmation** and **PRINt** commands to verify that the number of pages for each book has been added to the *worksheet*.
8. Now suppose that you would like to compute the price per page. Use the **HELP** command to obtain instructions for the use of the **LET** command, then use the **LET** command to do the desired computation. (Store the results in column 5.)
9. Use the **PRINt** command to view the results of the above computation.
10. After noticing that *Learning Statistics With Real Data* is the only paperback in the list, you decide to remove that book from the data set.
 - (a) Since it is always wise to leave the original data set intact, use the **COPY** command to copy columns 1 through 5 to columns 6 through 10.
 - (b) Now use the **DELEte** command to remove row 11 from columns 6 through 10.
 - (c) Use the **INFO** and **PRINt** commands to view the reduced data set.
11. You are now ready to exit Minitab, but before doing so you need to save your *worksheet*.
At the MTB > prompt, type

SAVE 'filename'

to save your *worksheet*. Again, be sure that your filename is enclosed in single quotes and contains no periods or other special characters, spaces, or file extensions. The **SAVE** command is the second "critical" Minitab command.

To exit Minitab, type **STOP** at the MTB > prompt.

12. Suppose that you forgot to answer a portion of your assignment. The following exercises will lead you through the process of restarting Minitab and opening both your *outfile* and your *worksheet*.
 - (a) At the `>` prompt, type **minitab**.
 - (b) At the MTB `>` prompt, use the **OUTFile** command to open your *outfile*.
 - (c) Next use the **RETRIEve** command to load your *worksheet*.
 - (d) Use the **INFORmation** and **PRINt** commands to ensure that you have loaded the correct *worksheet*.
 - (e) Since you haven't made any changes to the data, it is not necessary to **SAVE** the *worksheet* again. Simply use the **STOP** command to exit Minitab.

13. You will need to use a word processor to complete the assignment. The following exercises will lead you through the process of downloading the *outfile*, opening it in Microsoft Word, editing the word document.
 - (a) Click on **Window > New File Transfer**.
 - (b) Click once on the name of the *outfile*, then click on **Operation > Download**.
 - (c) Select the folder to which you would like to download the file, then press *Enter*.
 - (d) Click on **Window > Close** to close the file transfer window.
 - (e) Type `exit` at the system prompt (`>`), and press *Enter*.
 - (f) Click on **File > Exit** to close the SSH Secure Shell Client.
 - (g) Open Microsoft Word.
 - (h) Click on **File > Open** to import the *outfile*.
 - (i) Select the appropriate folder and click twice on the name of the *outfile*. (If the *outfile* is not displayed, then change the file type to All.)
 - (j) Select **Plain Text** and click on *OK*.
 - (k) Insert your name, course number, and section number at the top of the document, and delete any errors made during the Minitab session.