


This is an intentionally short lab to get you familiar with the basics of importing data into R and Rguroo.

Go to <https://www.rguroo.com>, click Register, then click Student and register for an Rguroo account using your student e-mail address(your\_login@csu.fullerton.edu). If you use your student e-mail address you will not have to pay for Rguroo access. Then, go into your student e-mail and complete the registration process.

Once you have registered for an Rguroo account, introduce yourself to six other students in the class. Ask them to tell you:

- Their name
- Their major
- Their height in inches
- Their favorite color
- Approximately how far away from campus they live
- How many units they are taking this semester

Record your responses in an Excel or Google Sheets spreadsheet. Follow the principles of tidy data: put each student in its own row, each variable in its own column, and each value in its own cell.

Save/export the file with a .csv extension. Then, go to the [Data](#) section of Rguroo and select [Data Import](#)  [Data Frame](#). Click on [Browse](#) and find the file on your desktop. Leave all other options as is for now, except maybe check the [Strip Blanks](#) box to make sure nothing weird is going on. If you do not like the default name, type a name in the [Name](#) section. Click on [Upload](#), and upon doing so the file will appear under the [Datasets](#) window on the left, and a table will appear in the middle of the interface, displaying the [Summary](#) of the dataset.

**Question #1** Paste below a screenshot of the Summary table that automatically appears when a dataset is uploaded to Rguroo.

---


## Summary of Data set 'Untitled spreadsheet - Sheet1'



### Numerical Variables

Variable	No. read	No. observed	No. missing	Min	Q1	Q2	Q3	Max	Mean	Std. deviation	Variance	SE of mean
height	8	8	0	63	67	69.5000	71	72	68.7500	3.10530	9.64286	1.09789
commute	8	8	0	0	3.50000	7.50000	22	27	11.6250	10.5144	110.554	3.71742
units	8	8	0	11	12.5000	14	15	18	14	2.13809	4.57143	0.755929

### Categorical Variables

Variable	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
X	person 1:1	person 2:1	person 3:1	person 4:1	person 5:1	person 6:1	(Other):2
name	abby:1	alex:1	angelica:1	asad:1	bryan:1	cody:1	(Other):2
major	bio:4	cs:3	math:1				
color	black:1	blue:5	purple:1	red:1			

Next, open R Studio on a lab computer (or on your computer if you have it already installed). In the top right pane, under *Environment*, click *Import Dataset*  *From Text (readr)*. Again, browse to find the file, and if you do not like the default name, type a name in the *Name* section. Once done, click *Import* to import the same file into R. Once the file is imported, you should see it in the Environment window.

Click *File*  *New File*  *R Script* (or press *Ctrl + Shift + N*) to open up a new script in the top left. In the script window, type:

```
summary(dataset)
# you should replace dataset with the actual name of the dataset
# in the Environment window
# comments are indicated with the # symbol - you don't actually
# have to type these commented lines
```

Next, put your cursor on that line (or highlight the code) and click *Run* (or press *Ctrl + Enter*). In the Console window in the bottom right, you should now see:

```
> summary(dataset)
```

followed by the output of the command.

**Question #2** Paste below the summary output from R.

```
vim r_program.r
Lab 1 done X
name      name      Age major      height      color      commute
person 1:1 abby      :1      bio :4      Min.       :63.00      black :1      Min.       : 0.00
person 2:1 alex       :1      cs  :3      1st Qu.:67.50      blue  :5      1st Qu.: 3.75
person 3:1 angelica:1      math:1      Median :69.50      purple:1      Median : 7.50
person 4:1 asad       :1      Mean      :68.75      red    :1      Mean       :11.62
person 5:1 bryan      :1      3rd Qu.:71.00      3rd Qu.:21.00
person 6:1 cody       :1      Max.Subm:72.00      Max.       :27.00
(Other) :2      (Other) :2
units
Min.      :11.00      Not graded
1st Qu.:12.75
Median :14.00      Tuesday, August 27, 2019, 2:00 PM
Mean      :14.00
3rd Qu.:15.00      10 mins 49 secs
Max.      :18.00
modified Tuesday, August 27, 2019, 1:49 PM
Press ENTER or type command to continue
submissions
Lab 1 Completed by Jared Dyreson.pdf August 27 2019, 1:49 PM
```

**Question #3** What differences (if any) do you see between the default *Rguroo* summary and the default *R* summary?

One is represented via *Rguroo* is similar to the original Excel spreadsheet which is more graphical. The text based version directly reads the CSV file and outputs it to a row column format in text.