

# Graphics Self-Test

## SER 2017 R Workshop

S Mooney

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1. Load the digitalis dataset (the url is [http://www.columbia.edu/~sjm2186/EPIC\\_R/dig.csv](http://www.columbia.edu/~sjm2186/EPIC_R/dig.csv)) into a data frame named dig. Make sure any character fields load as characters, not as factors
2. How many columns of data are in dig? How many rows?
3. Make a scatterplot with BMI on the X axis and systolic blood pressure on the y axis. Use base graphics
4. Change the axis titles to "Systolic Blood Pressure" and "Body Mass Index" as appropriate
5. Add a title: "BMI and Blood Pressure"
6. Make a histogram of ages
7. Make a histogram of ages such that the title is "Age Histogram"
8. Create a variable named 'older' that is true for those above the median age
9. Print out a frequency table of age. How many subjects are in the older group
10. Make a boxplot of systolic blood pressure readings by age
11. Change the labels of the boxplot so the left box plot (for younger subjects) is labeled "Younger" and the right is labeled "Older"
12. Okay, now we'll try ggplot2
13. Make a scatterplot with BMI on the X axis and systolic blood pressure on the y axis using ggplot.
14. Change the axis titles to "Systolic Blood Pressure" and "Body Mass Index" as appropriate
15. Add a title: "BMI and Blood Pressure"

16. Make a histogram of ages
17. Add the title is "Age Histogram"
18. Make a boxplot of systolic blood pressure readings by age
19. Change the labels of the boxplot so the left box plot (for younger subjects) is labeled "Younger" and the right is labeled "Older"