

# Advancing into Analytics From Excel to Python and R



### ADVANCING INTO ANALYTICS



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Founder, Stringfest Analytics

- Data analyst & educator
- Analytics education blog: <a href="stringfestanalytics.com">stringfestanalytics.com</a>
- Building analytics courses & communities



# Advancing into Analytics

# OBJECTIVES FOR TODAY

- Why Advancing into Analytics?
  - Objectives
  - Pre-requisites
- A tour of the book
- Conclusion
  - Resources
  - What's with the bird?



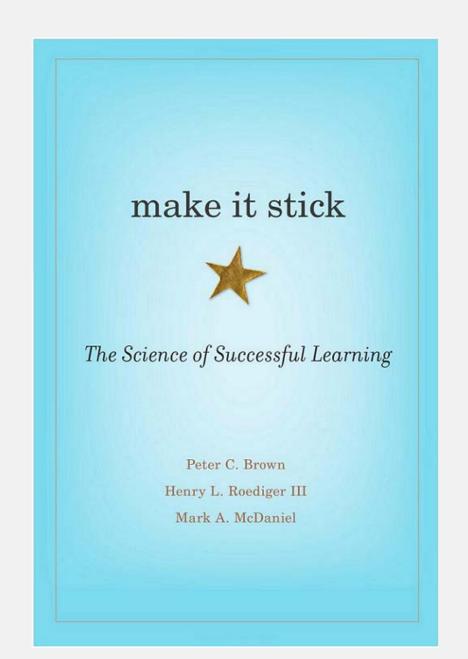
# WHY ADVANCING INTO ANALYTICS?



#### MAKE STRAIGHT THE PATH

"The more you can explain about the way your new learning relates to your prior knowledge, the stronger your grasp of the new learning will be, and the more connections you create that will help you remember it later."

-- Brown et al., *Make it Stick: The Science of Successful Learning* 





### LEARNING OBJECTIVE

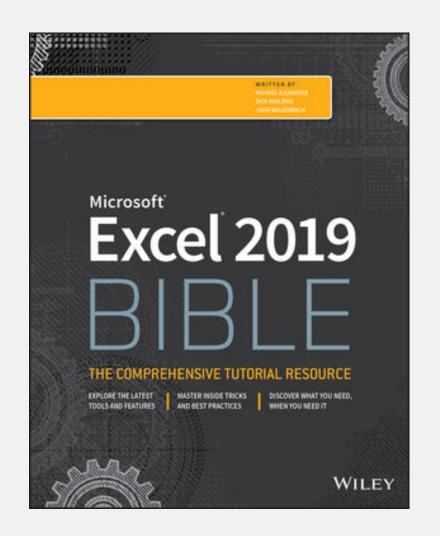
"By the end of this book, you should be able to conduct exploratory data analysis and hypothesis testing using a programming language"

- Data visualization
- Summary statistics
- Probability
- Inferential statistics
- Data cleaning & manipulation



### PRE-REQUISITES

- Absolute, relative, and mixed cell references
- Conditional logic and conditional aggregation (IF())
   statements, SUMIF()/SUMIFS(), and so forth)
- Combining data sources (VLOOKUP(),
   INDEX()/MATCH(), and so forth)
- Sorting, filtering, and aggregating data with PivotTables
- Basic plotting (bar charts, line charts, and so forth)

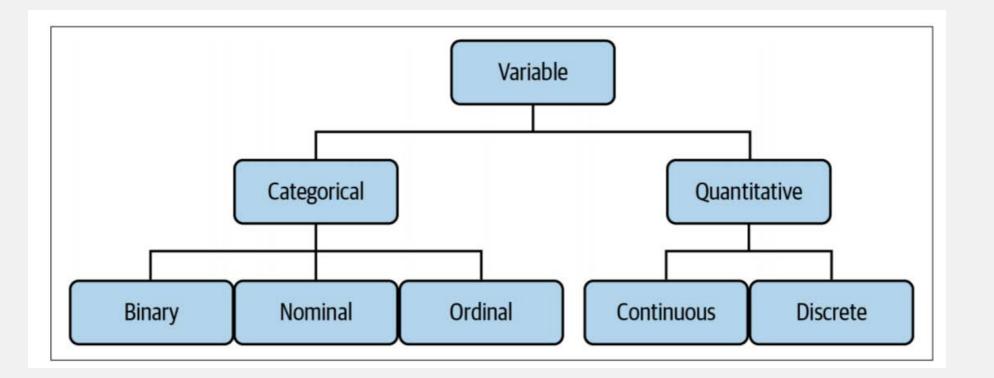




### A TOUR OF THE BOOK

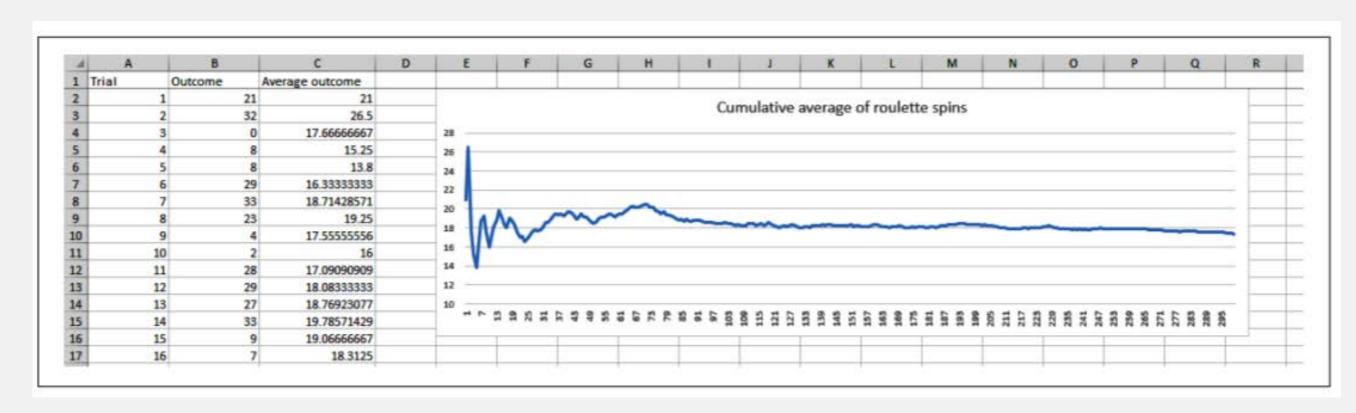


- 1. Foundations of Exploratory Data Analysis
- 2. Foundations of Probability
- 3. Foundations of Inferential Statistics
- 4. Correlation and Regression
- 5. The Data Analytics Stack

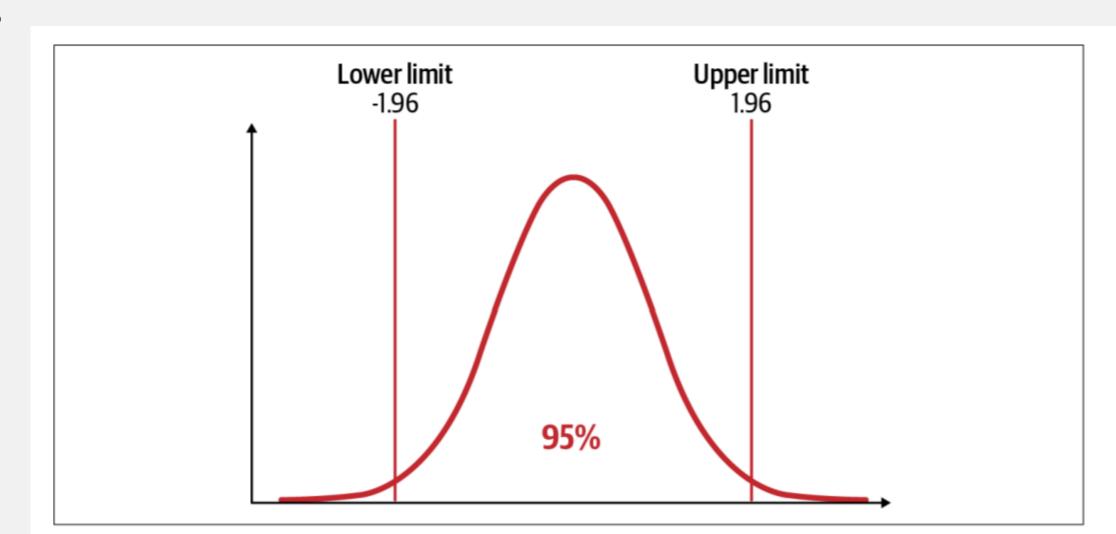




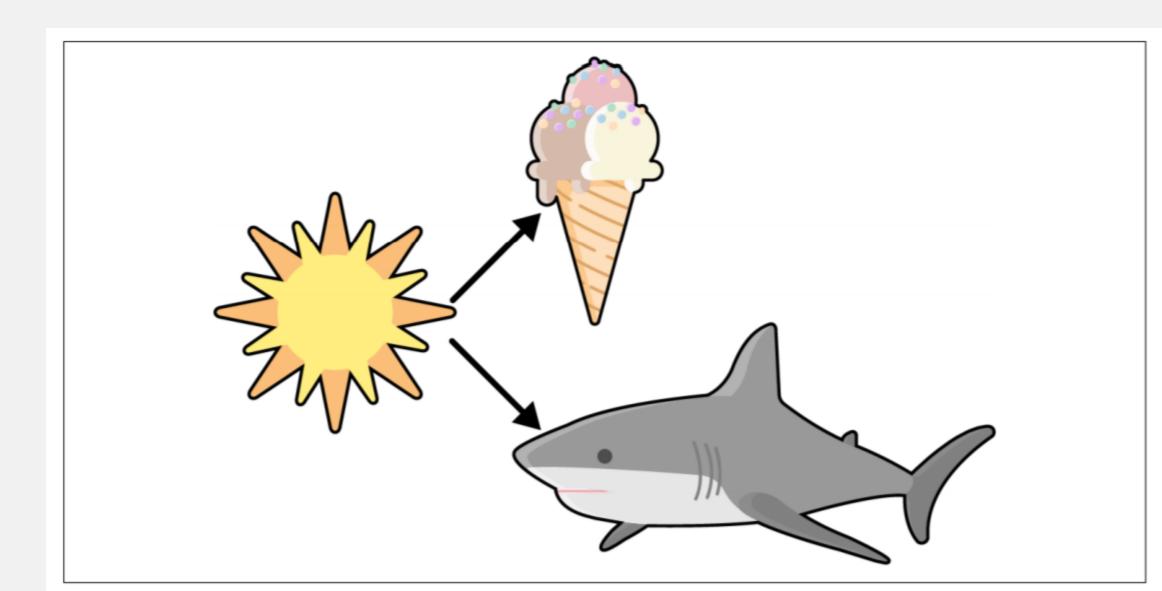
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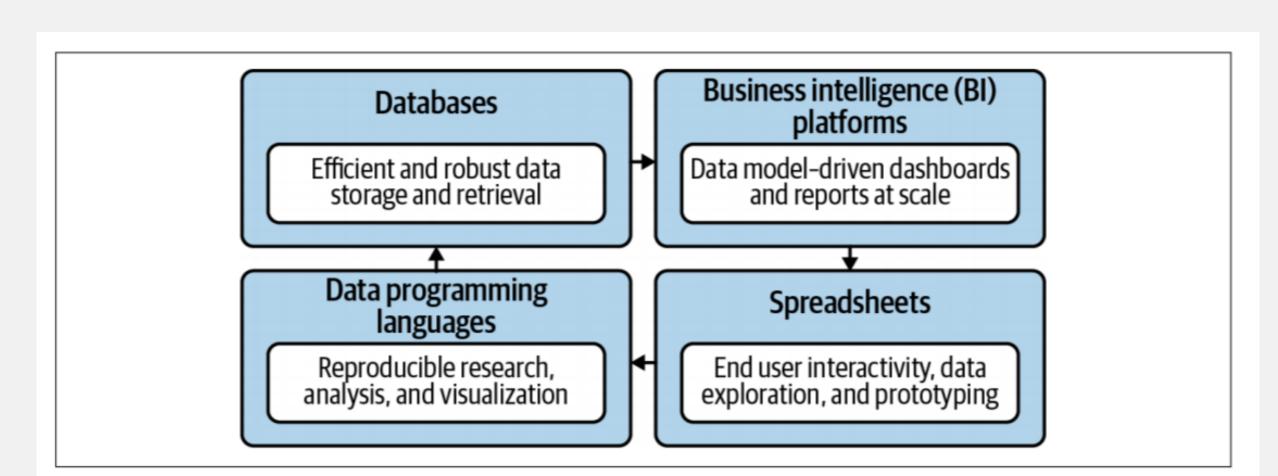
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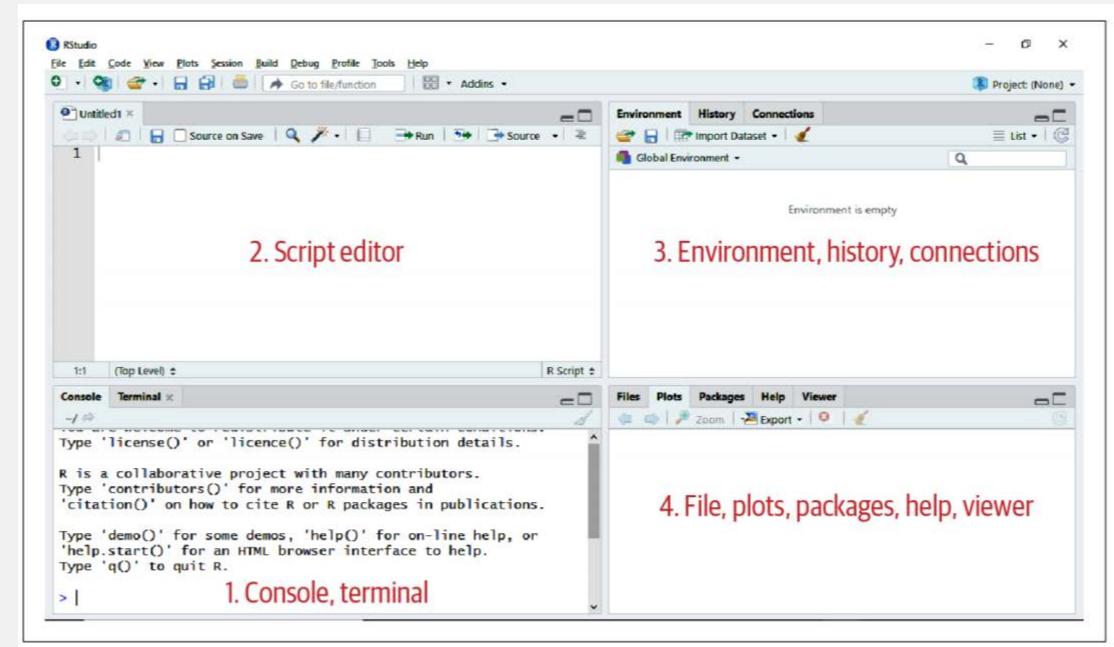
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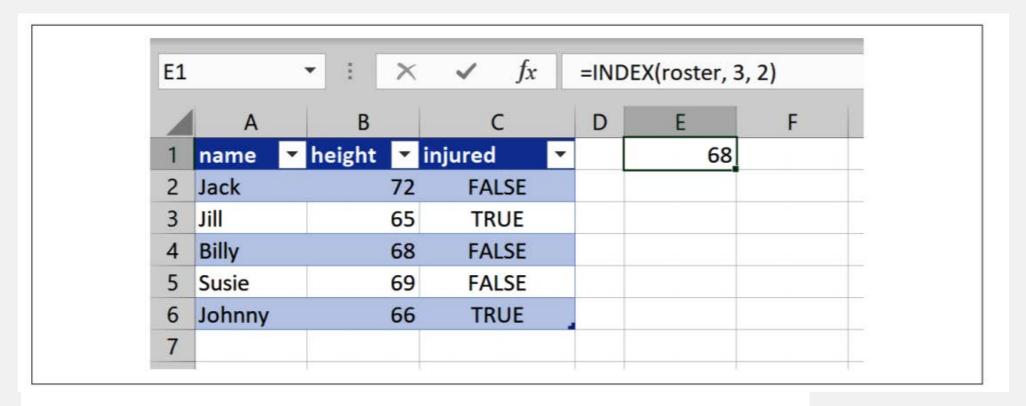
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- 7. Data Structures in R
- 8. Data Manipulation and Visualization in R
- 9. Capstone: R for Data Analytics



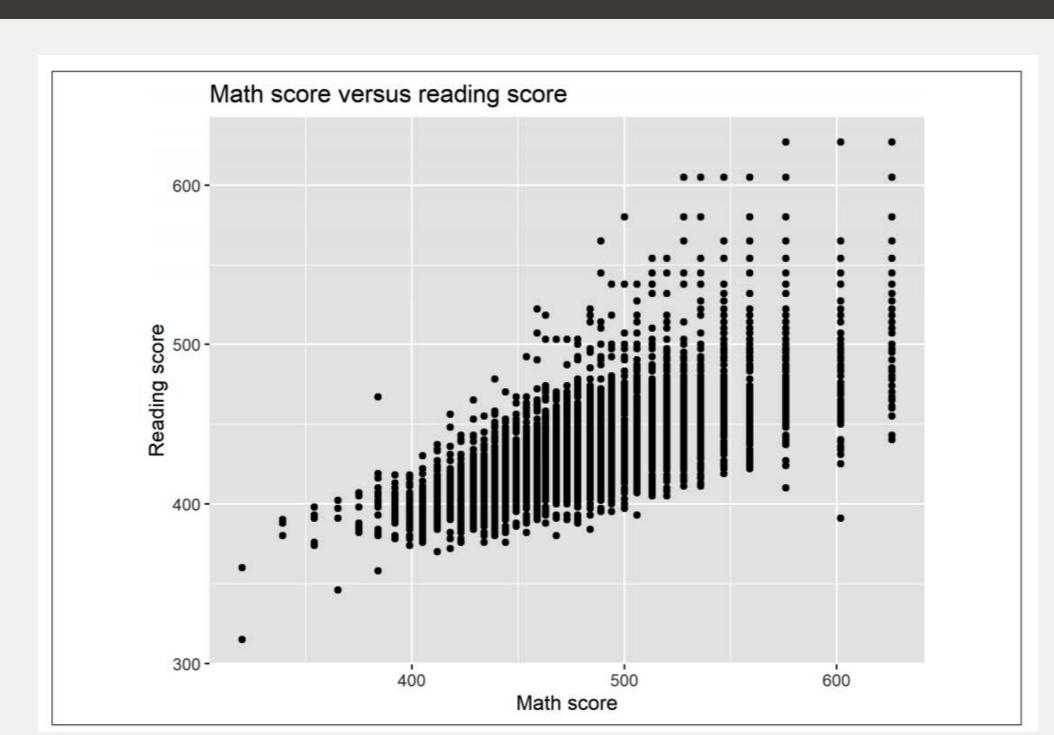
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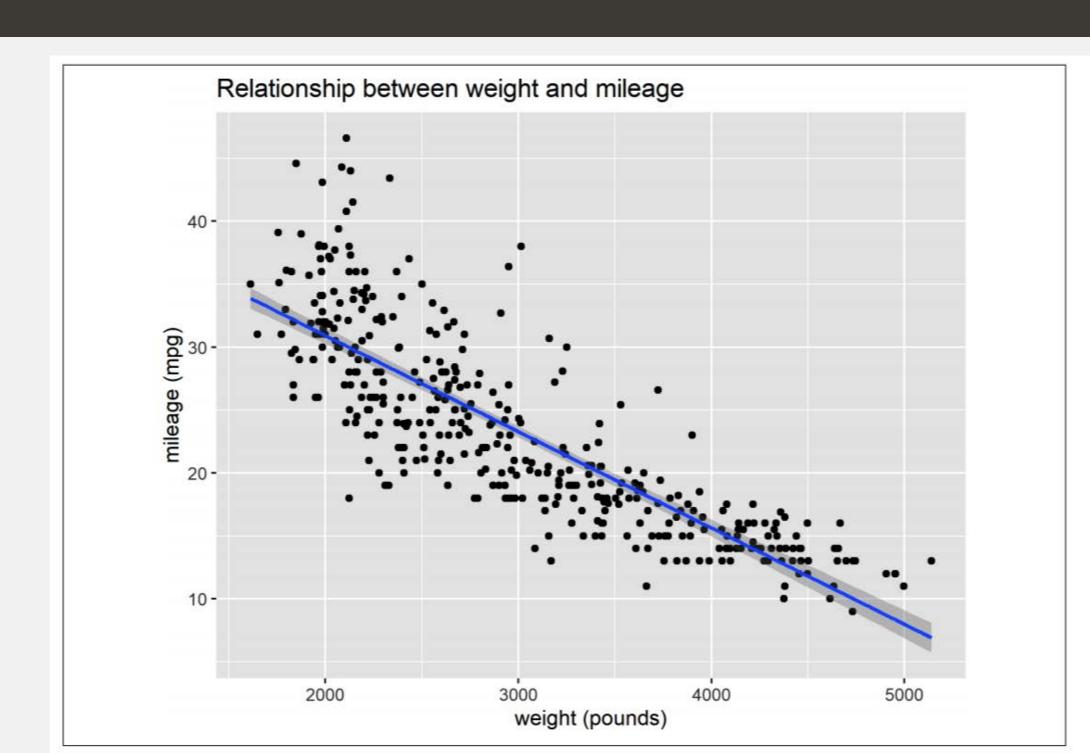
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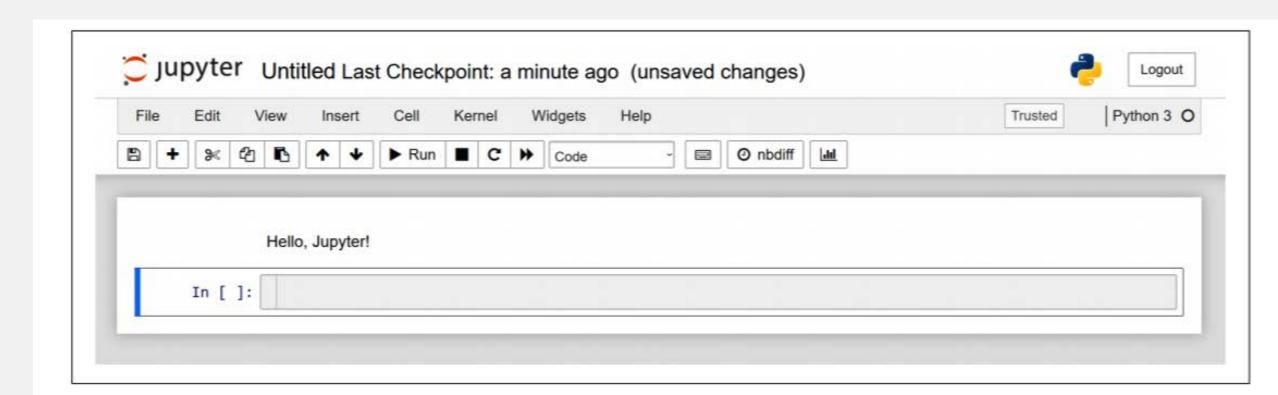


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#### III. FROM EXCEL TO PYTHON

- 10. First Steps with Python for Excel Users
- 11. Data Structures in Python
- 12. Data Manipulation and Visualization in R
- 13. Capstone: Python for Data Analytics
- 14. Conclusion and Next Steps



### CONCLUSION



#### **READ IT**

#### FOR FREE

- 30 days free:
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### WHAT'S WITH THE BIRD?

Clark's Nutcracker





### THANK YOU

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### QUESTIONS?

