

Analyze Data to Answer Questions

Google

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# Week 4

Analyze Data to Answer Questions

## Week 4

Discuss the topic here.

102 threads · Last post 2 hours ago

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## Performing data calculations



Google Career Certificates

Calculations are one of the more common tasks that data analysts complete during analysis. In this part of the course, you'll explore formulas, functions, and pivot tables in spreadsheets and queries in SQL, all of which will help with your calculations. You'll also learn about the benefits of using SQL to manage temporary tables.

Less

## Learning Objectives

- Describe the use of functions to conduct basic calculations on data in spreadsheets
- Discuss the use of pivot tables to conduct calculations on data in spreadsheets
- Demonstrate an understanding of the use of SQL queries to complete calculations
- Explain the importance of the data-validation process for ensuring accuracy and consistency in analysis
- Discuss the use of SQL queries to manage temporary tables
- Reflect on how conditional statements can be used to create complex queries and functions
- Generate multiple points of summary based on a wide variety of conditions using COUNTIF, SUMIF, MAXIF, and AVERAGEIF

Less

## Get started with data calculations



Video: Data calculations 2 min

Resume



Video: Common calculation formulas 10 min



Video: Functions and conditions 8 min



Reading: Functions with multiple conditions 10 min



Practice Quiz: Hands-On Activity: Working with conditions 2 questions



Video: Composite functions 5 min



Practice Quiz: Test your knowledge on data calculations 3 questions

## Pivot...pivot...pivot...



Video: Working with pivot tables 12 min



Reading: Using pivot tables in analysis 10 min



Practice Quiz: Test your knowledge on using pivot tables 3 questions

## Learn more SQL calculations



Video: Queries and calculations 4 min



Reading: Optional: Upload the avocado dataset to BigQuery 10 min



Video: Embedding simple calculations in SQL 7 min

- ▶ **Video:** Calculations with other statements 4 min
- 📖 **Practice Quiz:** Hands-On Activity: Calculations in SQL 2 questions
- 🗨 **Discussion Prompt:** Calculations and queries 10 min
- 📖 **Practice Quiz:** Test your knowledge on SQL calculations 3 questions

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### The data-validation process

- ▶ **Video:** Check and recheck 5 min
- 📖 **Reading:** Types of data validation 5 min
- 📖 **Practice Quiz:** Hands-On Activity: From spreadsheets to BigQuery 2 questions
- 📖 **Reading:** Learning Log: Finish your data analysis checklist 20 min
- 📖 **Practice Quiz:** Test your knowledge on data validation 3 questions

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### Using SQL with temporary tables

- ▶ **Video:** Temporary tables 6 min
- 📖 **Practice Quiz:** Hands-On Activity: Create temporary tables 2 questions
- ▶ **Video:** Multiple table variations 3 min
- 📖 **Reading:** Working with temporary tables 10 min
- 📖 **Reading:** Your intermediate guide to SQL 10 min
- 📖 **Practice Quiz:** Test your knowledge on using SQL with temporary tables 3 questions

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### Weekly challenge 4

- 📖 **Reading:** Glossary: Terms and definitions 5 min
- 📖 **Quiz:** Weekly challenge 4 8 questions Due Aug 2, 1:59 AM CDT

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### Course challenge

- 📖 **Quiz:** Course challenge 13 questions Due Aug 2, 1:59 AM CDT
- 🎉 **Video:** Congratulations! 1 min
- 📖 **Reading:** Coming up next... 10 min

