Data to Insights with Google Cloud course series

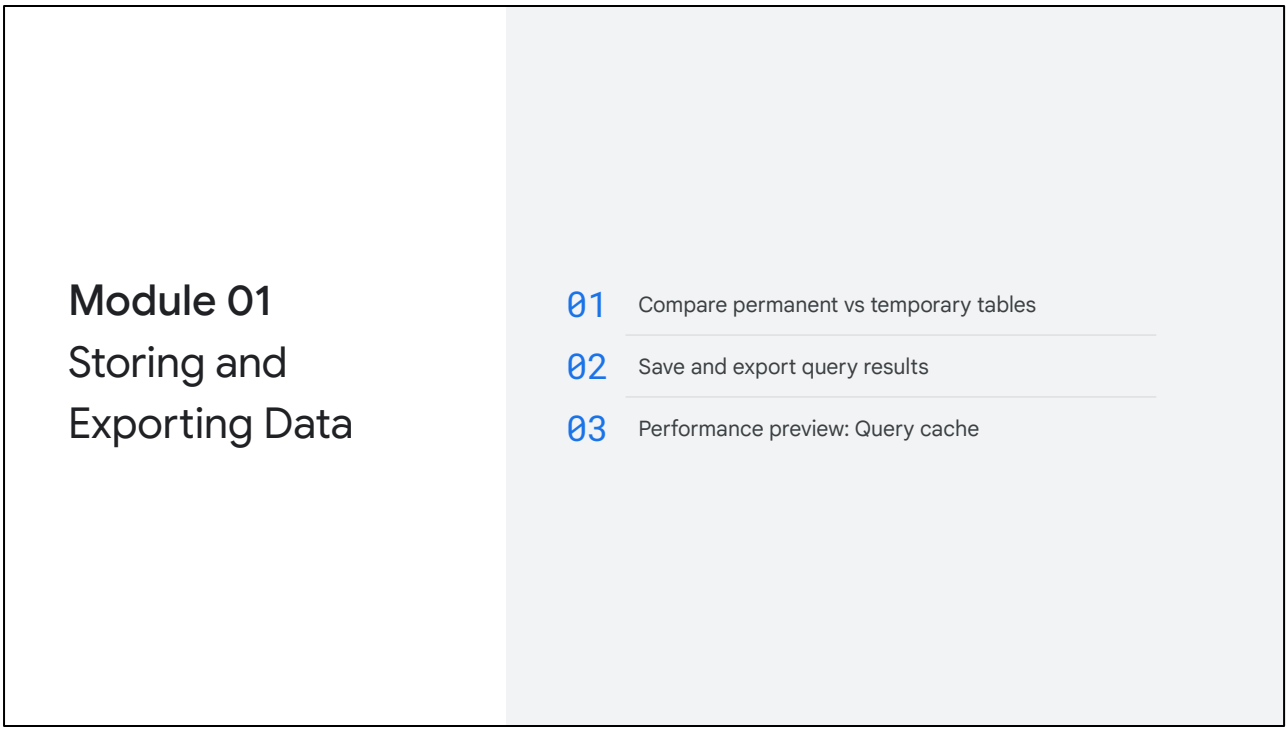
01 Exploring and Preparing your Data with BigQuery

02 Creating New BigQuery Datasets and Visualizing Insights

03 Achieving Advanced Insights with BigQuery

04 Applying Machine Learning to your Data with Google Cloud

Congratulations. You've completed **Creating New BigQuery Datasets and Visualizing Insights**, the second course in the Data to Insights with Google Cloud course series. Let's recap the key learning points of this course series.

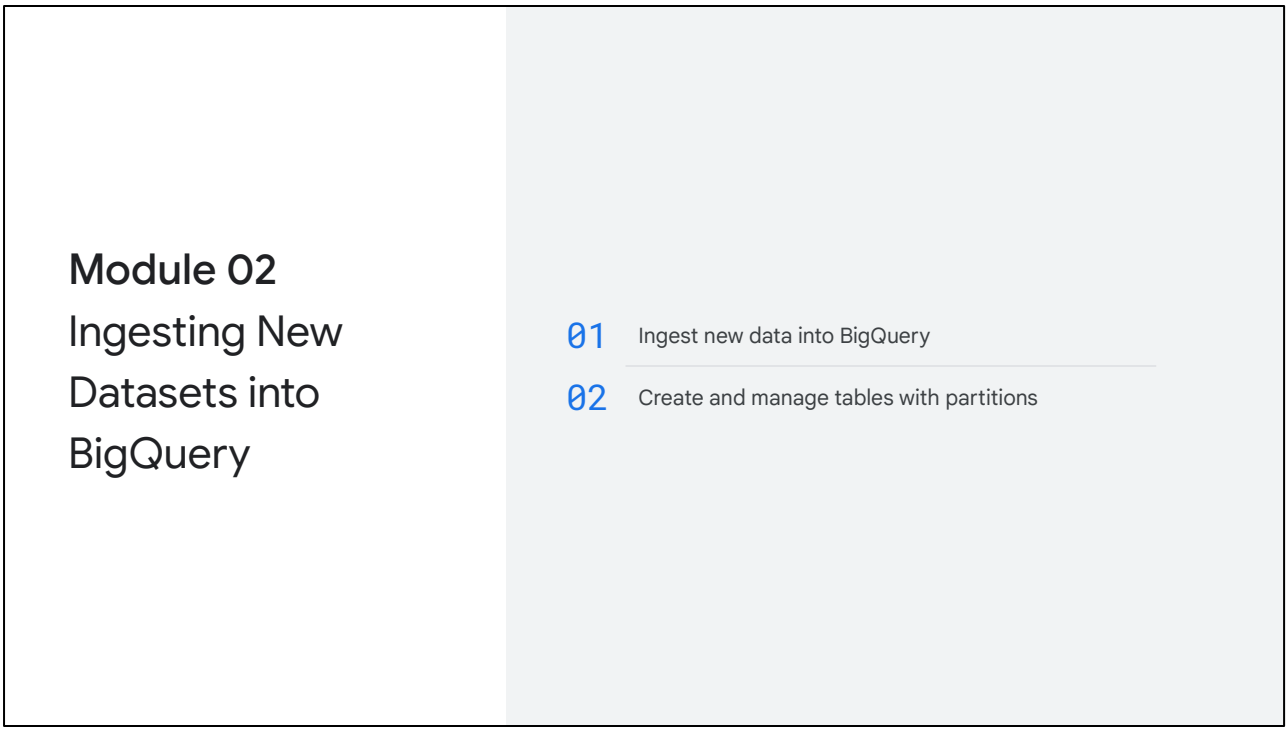


In module 1, storing and exporting data was introduced.

One of the core building blocks of data analysis is creating and running your SQL queries on raw data sources, and then saving those results into new tables that you can access later. You learned about the difference between permanent and temporary data tables, and how to store the results of your queries.

You also learned about query cache, which results in faster query results, and how to store your query as a View.

Lastly in module 1, you completed a lab where you created permanent tables and access-controlled views in BigQuery.

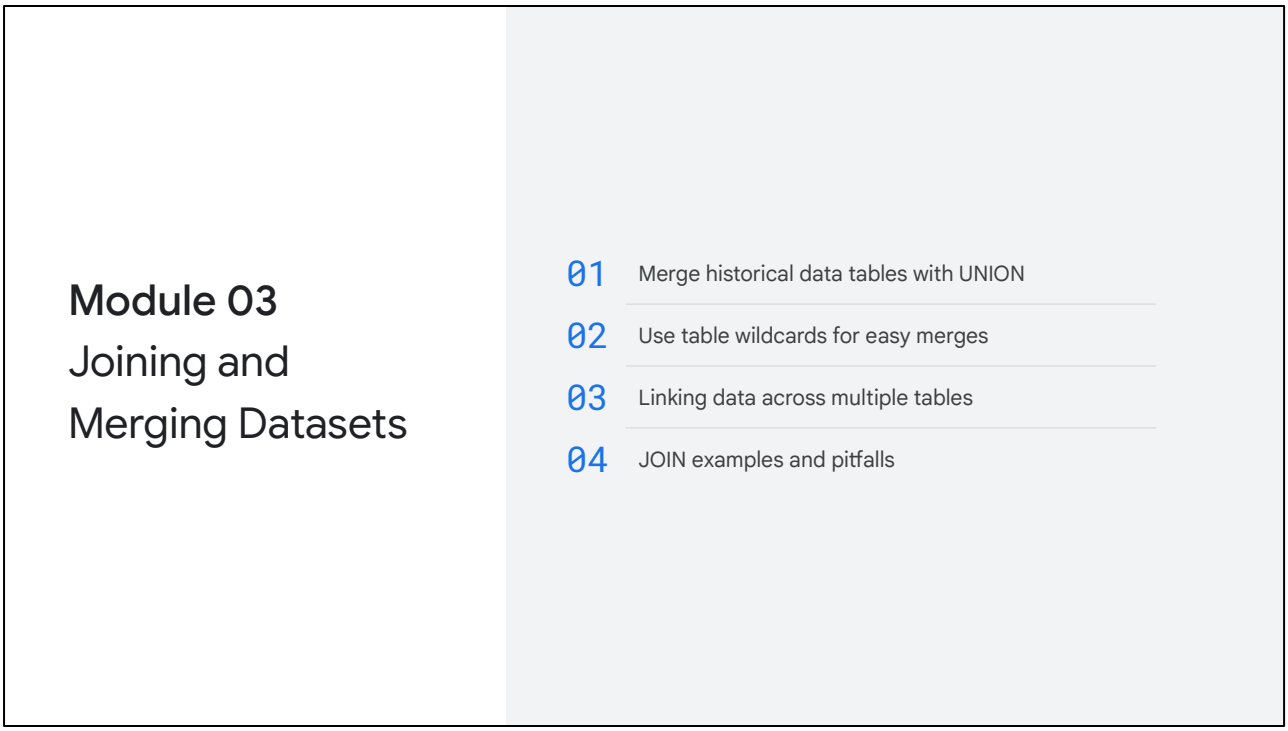


In module 2, ingesting new datasets into BigQuery was introduced.

You learned about the difference between loading data into BigQuery versus querying it directly from an external data source.

You also learned about streaming records into BigQuery through the API.

Lastly in module 2, you completed a lab where you practiced loading data into BigQuery from external sources like Cloud Storage and Google Sheets. You also learned how to set up an external data connection.



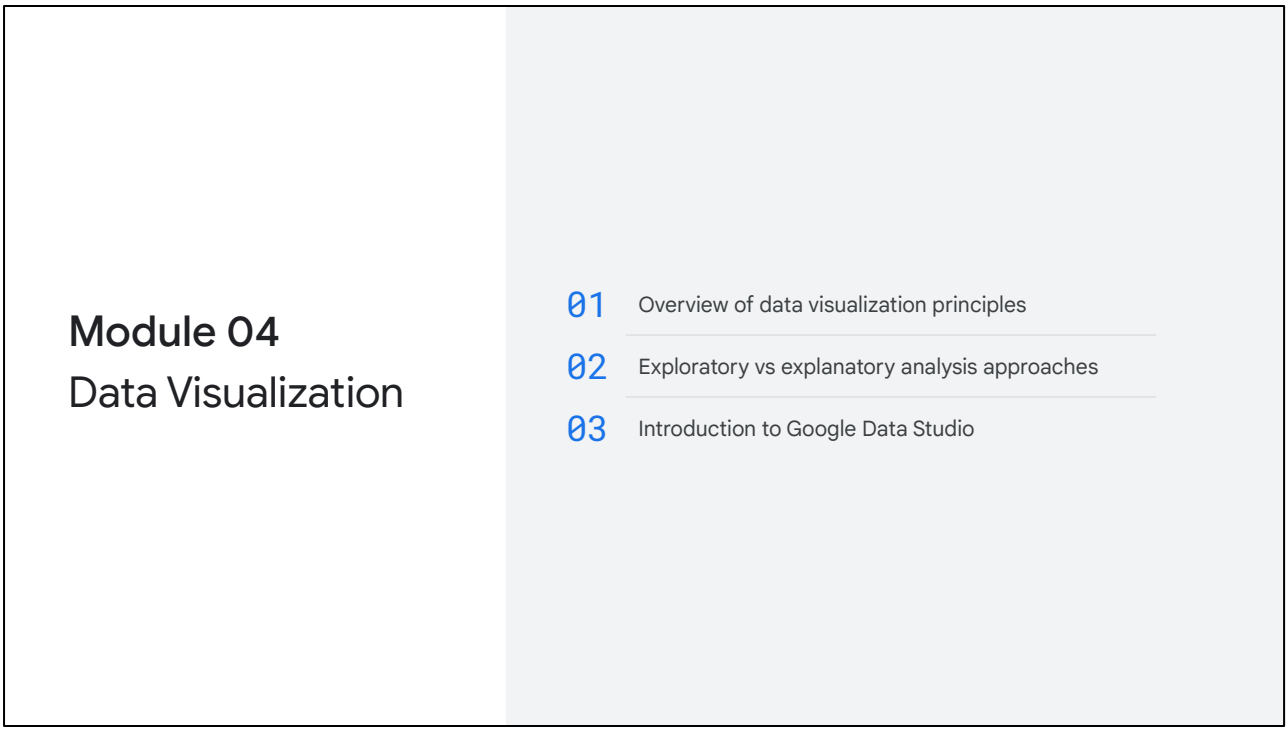
In module 3, joining and merging datasets was introduced.

You learned how to append additional historical datasets together through UNIONs and how to make your merges easier by using the table wildcard.

You also learned about JOINs, where you combine data from separate tables that share a common element into one table.

Then, you learned about the different types of JOINs and pitfalls to be aware of when creating them.

Lastly in module 3, you completed a lab where you brought data together from different data tables through UNIONS and JOINS.



In module 4, data visualization was introduced.

One of the key outputs and deliverables that data analysts create are those insightful reports you present to your audience. You learned a little visualization theory and best practices by comparing good and bad visualizations.

You also learned about dimensions and measures, a core visualization concept.

Then, you explored the Google Data Studio UI before completing a lab where you created a new report and added visuals and interactive filters for your reporting users.

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We look forward to welcoming you to the next course in the *Data to Insights with Google Cloud* course series, **Achieving Advanced Insights with BigQuery**.

In the next course, you will build on your growing knowledge of SQL as you dive into advanced features and how to break apart a complex query into manageable steps.

You will learn about the internal architecture of BigQuery which uses column-based sharded storage. You will also learn advanced SQL topics like nested and repeated fields through the use of Arrays and Structs. Lastly you will dive into optimizing your queries for performance and how you can secure your data through authorized views.

See you there!