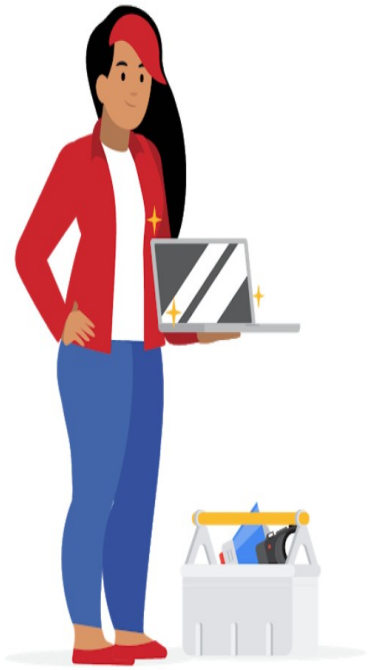
Key data analyst tools

As you are learning, the most common programs and solutions used by data analysts include spreadsheets, query languages, and visualization tools. In this reading, you will learn more about each one. You will cover when to use them, and why they are so important in data analytics.



Spreadsheets

Data analysts rely on spreadsheets to collect and organize data. Two popular spreadsheet applications you will probably use a lot in your future role as a data analyst are Microsoft Excel and Google Sheets.

Spreadsheets structure data in a meaningful way by letting you

- Collect, store, organize, and sort information
- Identify patterns and piece the data together in a way that works for each specific data project
- Create excellent data visualizations, like graphs and charts.

Databases and query languages

A database is a collection of structured data stored in a computer system. Some popular Structured Query Language (SQL) programs include MySQL, Microsoft SQL Server, and BigQuery.

Query languages

- Allow analysts to isolate specific information from a database(s)
- Make it easier for you to learn and understand the requests made to databases

- Allow analysts to select, create, add, or download data from a database for analysis

Visualization tools

Data analysts use a number of visualization tools, like graphs, maps, tables, charts, and more. Two popular visualization tools are Tableau and Looker.

These tools

- Turn complex numbers into a story that people can understand
- Help stakeholders come up with conclusions that lead to informed decisions and effective business strategies
- Have multiple features

- **Tableau**'s simple drag-and-drop feature lets users create interactive graphs in dashboards and worksheets

- **Looker** communicates directly with a database, allowing you to connect your data right to the visual tool you choose

A career as a data analyst also involves using programming languages, like R and Python, which are used a lot for statistical analysis, visualization, and other data analysis.

Key takeaway

You have a lot of tools as a data analyst. This is a first glance at the possibilities, and you will explore many of these tools in-depth throughout this program.