

Build Your Data Science Skills

As a beginner in data science, one of the biggest challenges you might face is finding data to work with. Fortunately, there are plenty of free data resources available that can help you practice your skills and build your portfolio. If you're interested in using Power BI/ Tableau and SQL, you're in luck. There are many data sets available that you can use to practice your skills and build your expertise. Here are some of our favorite free data resources for beginner data scientists:

- a. Kaggle: A platform that provides access to a wide range of datasets and allows you to compete in machine learning competitions. Kaggle is a great place to start if you're looking for a wide variety of datasets to practice with. <https://www.kaggle.com/>
- b. Open Data Network: A search engine that helps you find and access data from thousands of sources, including government agencies, nonprofits, and private companies. This resource is particularly useful if you're looking for data from specific industries or regions. <https://www.opendatanetwork.com/>
- c. Data.gov: A repository of over 200,000 datasets from over 75 federal agencies, covering topics like healthcare, education, energy, and more. If you're interested in working with government data, this is the place to start. <https://www.data.gov/>
- d. World Bank Data: A platform that provides free access to data about development in countries around the world, including social, economic, and environmental indicators. This resource is particularly useful if you're interested in working with international data. <https://data.worldbank.org/>
- e. Google Public Data Explorer: A tool that makes large datasets easy to explore, visualize, and communicate. This is a great resource if you're looking for a user-friendly way to explore data sets without having to write SQL queries. <https://www.google.com/publicdata/directory>

Once you've found a data set that interests you, you can use Power BI, Tableau and SQL to analyze and visualize the data. Power BI and Tableau is powerful data visualization tools that can help you create interactive dashboards and reports, while SQL is a language used to manage and manipulate data in a database.

As a beginner, you might want to start with some simple exercises. For example, you could try importing a data set into Power BI and creating a simple visualization. Or, you could practice writing SQL queries to extract specific data from a database. To get you started, here are some sample exercises you can try using these free data resources:

Import a data set from Kaggle into Power BI and create a bar chart that shows the distribution of a particular variable. Write a SQL query to extract data from a database on the Open Data Network and create a visualization in Power BI that shows the relationship between two variables.

Import a data set from Data.gov into Power BI and create a scatter plot that shows the relationship between two variables. Write a SQL query to extract data from a database on the World Bank Data platform and create a line chart that shows the trend of a particular variable over time.

Import a data set from Google Public Data Explorer into Power BI and create a pie chart that shows the distribution of a particular variable. By practicing with these exercises, you can build your skills and gain confidence in using Power BI and SQL. You'll also build a portfolio of data visualizations and queries that you can use to showcase your skills to potential employers or clients.