

2. Python is popular among data analysts due to its versatility, ease of learning, and extensive libraries for data manipulation and analysis. Its readability and syntax simplicity make it an accessible language for beginners, while its powerful capabilities and scalability make it suitable for handling complex data tasks.

3. The top 5 companies in the world that use Python for software engineering or analytics include **Amazon, Google, Meta, Spotify, and Netflix**. These companies leverage Python for various purposes, such as backend development, data analysis, machine learning, and automation, due to its flexibility and rich ecosystem of libraries.

4.

- For a small dataset requiring quick tweaks and minor analysis, **Excel** would be suitable due to its user-friendly interface and quick visualization capabilities.
- When retrieving data from a very large database, **SQL** would be the preferred tool due to its ability to efficiently handle large datasets and perform complex queries.
- For a dataset with 15,000,000 rows and 350 columns that needs sorting and preparation for advanced analysis, **Python** would be the best choice.

8.



The image shows the JupyterLab file browser interface. At the top, there's a Jupyter logo and 'Quit' and 'Logout' buttons. Below that are tabs for 'Files', 'Running', and 'Clusters'. A message says 'Select items to perform actions on them.' with 'Upload', 'New', and a refresh icon. The main area is a table of files and folders.

<input type="checkbox"/>	0		Name	Last Modified	File size
<input type="checkbox"/>		📁	/		
<input type="checkbox"/>		📁	anaconda3	7 minutes ago	
<input type="checkbox"/>		📁	Applications	a year ago	
<input type="checkbox"/>		📁	Desktop	6 hours ago	
<input type="checkbox"/>		📁	Documents	2 months ago	
<input type="checkbox"/>		📁	Downloads	14 minutes ago	
<input type="checkbox"/>		📁	Movies	a year ago	
<input type="checkbox"/>		📁	Music	4 months ago	
<input type="checkbox"/>		📁	OneDrive	a year ago	
<input type="checkbox"/>		📁	Pictures	5 months ago	
<input type="checkbox"/>		📁	Public	a year ago	
<input type="checkbox"/>		📄	ERD - Rockbuster	15 days ago	343 kB