**Data Analytics Tools:**

1. **Spreadsheets** - Spreadsheets are productivity software packages that allow users to create documents that organize any type of data into rows and columns. Users may place any data they like in the spreadsheet and then quickly and easily perform mathematical calculations, such as finding the sum of the values in a row or searching out the minimum, maximum, mean, and median values in a dataset.
2. **R programming** - R originally appeared in the 1990s as a statistical programming language

* The R programming language is extremely popular among data analysts because it is focused on creating analytics applications.

1. **Python -** Python is a general-purpose programming language. This means that it is capable of creating software to meet just about any need you might imagine. You can do everything from code a video game to perform a complex data analysis in Python.
2. Structured Query Language (SQL)

* **Data Definition Language (DDL)** is used mainly by developers and administrators. It's used to define the structure of the database itself. It doesn't work with the data inside a database, but it sets the ground rules for the database to function.
* **Data Manipulation Language (DML)** is the subset of SQL commands that are used to work with the data inside of a database. They do not change the database structure, but they add, remove, and change the data inside a database.

**Three DDL commands:**

* **The CREATE** command is used to create a new table within your database or a new database on your server.
* **The ALTER** command is used to change the structure of a table that you've already created. If you want to modify your database or table, the ALTER command lets you make those modifications.
* **The DROP** command deletes an entire table or database from your server. It's definitely a command that you'll want to use with caution

**Four DML commands:**

* **The SELECT** command is used to retrieve information from a database. It is the most commonly used command in SQL as it is used to pose queries to the database and retrieve the data that you're interested in working with.
* **The INSERT** command is used to add new records to a database table. If you are adding a new employee, customer order, or marketing activity, the INSERT command allows you to add one or more rows to your database.
* **The UPDATE** command is used to modify rows in the database. If you need to change something that is already stored in your database, the UPDATE command will do that.
* **The DELETE** command is used to delete rows from a database table. Don't confuse this command with the DROP command. The DROP command deletes an entire database table, whereas the DELETE command just deletes certain rows from the table.

**Statistics Packages:**

* **IBM SPSS** - SPSS is one of the oldest statistical software packages, first released in 1968, but it continues to be used today by many statisticians.
* **STATA**- statistical analysis package that dates back to the 1980s and continues to be updated today.
* It offers essentially the same features as SPSS and SAS and provides users with both a graphical interface and a command-line interface depending on their personal preference.
* Stata is less widely used than the more popular
* **Minitab -** Minitab shares most of the same features as SPSS, SAS, and Stata but fits into the same category as Stata - an older tool that is not widely used today.

**MACHINE LEARNING :**

1. **RapidMiner -** graphical machine learning tool that works in a manner similar to IBM SPSS Modeler. It offers access to hundreds of different algorithms that may be placed in a visually designed machine-learning workflow.

**ANALYTICS SUITES :**

1. **IBM Cognos -** uses a web-based platform to offer analysts within an organization access to their data and is backed by IBM's Watson artificial intelligence capability.
2. **Microsoft Power BI -** easy integration with those packages and cost-effective bundling within an organization's Microsoft enterprise license agreement.
3. **MicroStrategy -**
4. **Domo -** allows businesses to ingest their data and apply a variety of analytic and modeling capabilities. It is not a very widely used tool
5. **Datorama -** focuses on a specific component of an organization's business: sales and marketing. focused on applying machine learning, visualization, and other analytics techniques to the sales and marketing process.
6. **AWS QuickSight -** dashboarding tool available as part of the Amazon Web Services cloud offering. This tool's power comes from the fact that it is available on a pay-as-you-go basis and its integration with the powerful data storage, data warehousing, machine learning, and artificial intelligence capabilities offered by the Amazon cloud
7. **Tableau**
8. **Qlik -** popular SaaS analytics platform, offering access to cloud-based analytics capabilities.
9. **BusinessObjects -** BusinessObjects is an enterprise reporting tool from SAP that is designed to provide a comprehensive reporting and analytics environment for organizations.