



Data Analyst



SQL:

1. Introduction

- Introduction to the role and working environments of the data analyst
- Introduction to SQL Server Management Studio.

2. Data Retrieval Language:

- Basic Concepts and Datatypes
- Select Statement
- Filter Data with Where Statement and Logical Operators
- Aggregate Functions: Avg, Max, Min, Sum, Count
- Organize Data With Order By, Group By, Top, Distinct etc
- Cube / Rollup / Grouping Sets
- Built In Functions: Use Scalar Functions, Math Functions, Date Functions.
- Join Multiple tables from the database.
- Use Sub-Queries and Common Table Expression.
- Union Multi Queries Together.
- Windows Functions By using Partition By.
- DML - Data Manipulation Language: Insert, Update, Delete.

3. Relational database management system:

- Entity Relationship Diagrams
- Data Types
- Database, Schemas, Tables, Keys, Constraint, Indexes

4. Transact-SQL:

- Stored Procedure
- Functions
- Views
- While, If, Break, Continue etc.

Python:

1. Introduction

- Introduction to Data Analysis with Pandas and Python
- Installation Jupyter Notebook
- Introduction to Jupyter Notebook

2. Basic Concepts:

- Comments
- Basic Data Types
- Operators
- Variables
- Built-In Functions
- Methods
- List, Dictionaries
- Index Positions and Slicing

3. Pandas Series:

- Working with Series
- Introduction To Methods
- Introduction To Attributes
- Parameters And Arguments
- Read Different Sources With Pandas
- Sort Index, Sort Values, Value counts
- Unique and Nunique
- Apply Method

4. Pandas DataFrame:

- Working With DataFrame
- Methods and Attributes
- Select Columns from DataFrame
- Add Columns to DataFrame
- Find missing Values
- Astype method
- Filter Data and Using conditions
- Clean Data with drop duplicates method
- Loc and Iloc
- Query Method
- Multi Indexing
- Pivot and PivotTable
- GroupBy And Agg Methods
- Merge, Concat and Join
- Working with Dates and Times
- Visualization with pandas

5. Seaborn and Matplotlib Visualization:

- Histograms
- Box and Violin Plots
- Regressions
- HeatMaps Correlation
- Bar Plot
- Distplot

Excel:

1. Basic Concept:

- Introduction
- vLookup / hlookup/ Index&Match / xlookup
- Agg Functions: Sum, Count, Min, Max
- If Statement: If, Countif, Sumif,
- Scalar Functions: Right, Split, Len Etc.
- Date Functions
- Math Functions
- Concatenating Data

2. Data Analysis:

- Pivot Table
- Multi Conditions
- What If Analysis
- Goal Seek
- Visualizing Data
- Sorting And Filtering
- Graph and charts
- Forecast sheets
- Summarizing Data
- Get Data From Different Sources

Power BI:

1. Introduction to Power BI:

- What is that BI Tools and Power BI
- Install Power BI
- Understanding the ETL Process
- Overview in powerbi desktop

2. Power Query Editor:

- Connecting to Different Sources
- Data Preparation in Power Query Editor:
 - Cleaning
 - Understanding Row Operations
 - Filtering
 - Add Columns
 - Replacing Values
 - Conditional Columns

3. Data Model

- Relationships: One To One, Many To Many, One to Many
- Dax Basics Operators
- Using Calculated column and Creating Measures
 - If Statement

4. Create Dashboard

- Creating Visualization With Power BI
- Formatting Charts
- Drill Down and filtering Graphs

מסלול קורסי העשרה

- פתיחת עסק עצמאי
- דיני חוזים
- מכירות
- דיני עבודה
- פיתוח עסקי
- שפת גוף
- מחקרי שוק והתנהגות צרכנים
- כתיבת תוכן שיווקי
- אסטרטגיה למנהל דיגיטל
- מבוא לשיווק דיגיטלי

