



MS POWER BI SYLLUBUS

PowerBICompleteIntroduction

- ✓ PowerBIIntroduction
- ✓ DataVisualization,Reporting
- ✓ BusinessIntelligence(BI),TraditionalBI,Self-ServicedBI
- ✓ Cloud BasedBI, OnPremiseBI
- ✓ PowerBIProducts
- ✓ PowerBIDesktop(PowerQuery,PowerPivot,PowerView)
- ✓ FlowofWorkinPowerBIDesktop
- ✓ PowerBIService, PowerBIReportServer,PowerBIMobile
- ✓ FlowofWork inPowerBI/Power BI Architecture
- ✓ ABriefHistory ofPowerBI

PBI Desktop Installation Power BI Desktop & Power BI Service

OverviewPowerBIDesktopSoftware Installation

- ✓ Download&Installationof PowerBIDesktopSoftware
- ✓ WhatarethePrerequisitestoInstallPowerBIDesktopSoftware

PowerQuerySoftwareOverview

- ✓ Overview of Power Query/Power Query Editor
- ✓ How to Open Power Query/Power Query Editor Software
- ✓ Connecting to Data Sources and Extracting the Data
- ✓ Establish connection to the Excel source, SQL Server
- ✓ Importing Data into Power Query Editor
- ✓ Transforming the Data in Power Query Editor using GUI Options
- ✓ Loading the Data into Power Pivot
- ✓ Understanding the M (Mashup) Language behind the GUI Options

PowerPivotSoftwareOverview

- ✓ UnderstandingaboutPowerPivot–AnMemoryColumnarDatabase
- ✓ AdvantageofInMemoryColumnar Database
- ✓ PowerPivot-xVelocityIn-memoryAnalyticsEngine(PreviouslycalledVertipaq)
- ✓ OverviewofDataModeling –ModelView(Previously RelationshipView)
- ✓ EnhancingtheDataModel–DAX(DataAnalysis eXpressions)Language –DataView

Power ViewSoftwareOverview

- ✓ OverviewofVisualizations,Fields,FieldWells
- ✓ UnderstandingDimensionColumns&FactColumns
- ✓ VisualizingtheDatausingPowerViewandPowerMaps–ReportView
- ✓ SavingReport
- ✓ PublishingtheReporttoPowerBIService

PowerBIServiceOverview

- ✓ PowerBIService Overview
- ✓ LogontoPowerBI Service
- ✓ SharetheReportswithClients

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PowerBIDesktopUserInterface

- ✓ UnderstandingPowerBIDesktopUserInterface
- ✓ FieldsPane,VisualizationsPane,FiltersPane
- ✓ Ribbon,MultipleViews(ReportView,DataView&Model View)
- ✓ ReportCanvas,PagesSection

BuildingBlocksof PowerBI

- ✓ Datasets,Visualizations,Reports,Dashboards&Tiles

PowerQuery

IntroductiontoPowerQuery&PowerQueryEditorUserInterface

- ✓ OverviewofPowerQuery /Query Editor
- ✓ HowtoOpenPowerQuery/QueryEditor
- ✓ ExtractingtheDatafromDataSources
- ✓ TransformingtheDatausingGUIOptions
- ✓ LoadingtheDatainPowerPivot
- ✓ Query EditorUI(QueriesPane, DataPane/ResultsPane,PowerQueryRibbon)

- ✓ Query Settings, PaneAppliedSteps, FormulaBar
- ✓ AdvancedEditor, QueryDependencies
- ✓ UnderstandingPowerQueryConceptually

Data Processing, Datatypes and Filters in Power Query

- ✓ HowDataProcessedinPowerQuery
- ✓ Datatypes, Changingthe Datatypeof aColumn, DetectDataType
- ✓ FiltersinPowerQueryandtheirPurpose
- ✓ TypesofFiltersinPowerQuery(BasicFiltering, AdvancedFiltering)
- ✓ AutoFilter/BasicFiltering
- ✓ FilteraColumnusing AdvancedTextFilters, NumberFilters, DateFilters
- ✓ FilterMultipleColumns

Inbuilt Column Transformations

- ✓ RemoveColumns /RemoveOtherColumns, ChooseColumns, GoToColumn
- ✓ NameorRenameaColumn
- ✓ ReorderColumns orSortColumns(MoveLeft, Right, To Beginning, ToEnd)
- ✓ ColumnfromExamples(FromAllColumns, FromSelection)
- ✓ AddColumn /CustomColumn
- ✓ DuplicateColumn, SplitColumn, MergeColumns
- ✓ PIVOT, UNPIVOTColumns, TransposeColumns
- ✓ ReplaceValues, RemoveEmpty

Inbuilt Row Transformations

- ✓ HeaderRoworUseFirstRowasHeaders, UseHeadersasFirstRow
- ✓ KeepTopRows, KeepBottomRows, KeepRangeofRows
- ✓ KeepDuplicates, KeepErrors
- ✓ RemoveTop Rows, RemoveBottomRows, RemoveAlternativeRows
- ✓ RemoveDuplicates, RemoveBlankRows, RemoveErrors
- ✓ GroupRows/GroupBy

Combine Queries (Merge Queries & Append

Queries)MergeQueries/JoinTables

- ✓ MergeQueries, MergeQueriesasNew
- ✓ NeedofMergeQueries, MinimumrequirementstoPerformMergeQueries
- ✓ TypesofJoins/JoinKinds/MergeType
 - LeftOuter(allfromfirst, matchingfromsecond)
 - RightOuter(allfromsecond, matchingfromfirst)
 - FullOuter(allrowsfromboth)
 - Inner(onlymatchingrows)
 - LeftAnti(rowsonlyinfirst), RightAnti(rowsonlyinsecond)

- ✓ CartesianJoinorCrossJoin,Self-Join
- ✓ MergingtheTablesusingMultipleJoinConditions
- ✓ HowtoMerge3Tables
- ✓ UseFuzzy MatchingOption

AppendQueries/Union ALLTables

- ✓ AppendQueries,Append QueriesasNew
- ✓ MinimumrequirementstoperformAppendQueries
- ✓ AppendTwoTables,AppendThreeor MoreTables
- ✓ Folderas Source
- ✓ AppendingMultipleFilesof sametypefromafolderusingSingleQuery
- ✓ AppendingMultipleExcelFiles andMultipleSheetsusingSingleQuery
- ✓ UnionAll,HowtogetUnionResult

QueryOptions

- ✓ CopyQuery,PasteQuery,DeleteQuery,RenameQuery
- ✓ EnableLoad,IncludeinreportRefresh
- ✓ DuplicateQuery,ReferenceQuery
- ✓ MovetoGroup,Move Up,Move Down
- ✓ CreateFunction,ConvertToParameter
- ✓ AdvancedEditor,Properties

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HomeTab Options

- ✓ Close&Apply,Apply,Close
- ✓ NewSource,RecentSources,EnterData,DataSourceSettings
- ✓ ManageParameters(ManageParameters,EditParameters,NewParameter)
- ✓ SuggestedValues(AnyValue,ListofValues,Query),ConverttoList
- ✓ QueryParametersandPowerBITemplates
- ✓ .pbix(PowerBIFile)and.pbix(PowerBITemplateFile)
- ✓ RefreshPreview,RefreshAll,CancelRefresh
- ✓ SortingData

TransformTabOptions

- ✓ ReverseRows,CountRows,ReplaceValues,ReplaceErrors,Fill Down,FillUp
- ✓ TextColumn,NumberColumn,Date&TimeColumnOptions
- ✓ StructuredColumn(Expand,Aggregate,ExtractValues)
- ✓ RunR Script, RunPythonScript

AddColumnTabOptions

- ✓ CreateCustomFunction,InvokeCustomFunction
- ✓ ConditionalColumn,IndexColumn,DuplicateColumn
- ✓ FromText,FromNumber,FromDate&TimeColumnOptions

PowerPivot

PowerPivotSoftwareOverview

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- ✓ EnhancingtheDataModel–DAX(DataAnalysiseXpressions)Language–DataView

PowerBI Data Modeling-ModelView(Previously RelationshipView)

- ✓ DataModelingIntroduction
- ✓ Relationships,NeedofRelationshipBetweenTables
- ✓ DimensionColumn,FactColumn,DimensionTable,FactTable
- ✓ StarSchema,SnowflakeSchema
- ✓ GalaxySchemaorHybridSchemaor FactConstellationSchema
- ✓ RelationshipTypes/CardinalityinGeneral
- ✓ One-to-One,One-to-Many(orMany-to-One),Many-to-Many
- ✓ AutoDetecttherelationship,Createanewrelationship
- ✓ Editexistingrelationships,Deletearerelationship
- ✓ MakeRelationshipActiveorInactive
- ✓ Crossfilterdirection(Single,Both),ApplySecurityFilterinBothDirections
- ✓ AssumeReferentialIntegrity

EnhancingtheDataModel-DAX

- ✓ WhatisDAX(DataAnalysiseXpressions)Language–FunctionalLanguage
- ✓ NewColumn,NewMeasure/ QuickMeasure,New Table
- ✓ DAX TableandColumnNameSyntax
- ✓ CreatingNewColumn,CreatingNewMeasure
- ✓ ImplicitMeasures,ExplicitMeasures
- ✓ DifferenceBetweenNewColumns&NewMeasures
- ✓ DAXOperators,TypesofOperators
- ✓ ArithmeticOperators,ComparisonOperators
- ✓ TextConcatenationOperator,LogicalOperators

DAXFunctions-Categories

- ✓ TextFunctions
- ✓ LogicalFunctions
- ✓ DateandTimeFunctions

- ✓ FilterFunctions
- ✓ Math&StatisticalFunctions
- ✓ TimeIntelligenceFunctions

DAXTextFunctions

- ✓ LEN,CONCATENATE (&)
- ✓ LEFT,RIGHT,MID
- ✓ UPPER,LOWER
- ✓ TRIM,SUBSTITUTE,REPLACE,BLANK

DAXLogical Functions

- ✓ IF, NestedIF
- ✓ TRUE,FALSE,NOT, OR,IN,AND
- ✓ IFERROR
- ✓ SWITCH

DAXDate&TimeFunctions

- ✓ CreatingDateDimensionTableforperformingTimeIntelligenceAnalysis
- ✓ YEAR, QUARTER,MONTH, DAY
- ✓ WEEKDAY,WEEKNUM
- ✓ FORMAT(TextFunction) → MonthName,WeekdayName
- ✓ DATE,TODAY, NOW
- ✓ HOUR,MINUTE,SECOND,TIME
- ✓ DATEDIFF,YEARFRAC,CALENDAR,CALENDARAUTO
- ✓ EDATE,EOMONTH,DATEVALUE
- ✓ WeekNumberofMonth,FiscalYear,FiscalQuarter

DAXFilterFunctions

- ✓ CALCULATE,CALCULATETABLE
- ✓ ALL,ALLSELECTED,ALLEXCEPT
- ✓ RELATED,RELATEDTABLE
- ✓ LOOKUPVALUE(Informationfunction)
- ✓ USERELATIONSHIP
- ✓ FILTER,DISTINCT(Column),DISTINCT(Table),VALUES,SELECTEDVALUE

DAXMathandStatistical Functions

- ✓ INT,ROUND,ROUNDUP,ROUNDDOWN
- ✓ DIVIDE,EVEN,ODD,POWER,SIGN,SQRT,FACT
- ✓ SUM, SUMX,MIN,MINX,MAX,MAXX,COUNT,COUNTX
- ✓ AVERAGE,AVERAGEX
- ✓ COUNTROWS,COUNTBLANK
- ✓ RANKX,SUMMARIZE

DAXTimeIntelligence Functions

- ✓ TimeIntelligenceIntroduction
- ✓ DateDimensionTable,Markas DateTable
- ✓ TOTALMTD,TOTALQTD,TOTALYTD
- ✓ PREVIOUSDAY,PREVIOUSMONTH,PREVIOUSQUARTER,PREVIOUSYEAR
- ✓ NEXTDAY,NEXTMONTH,NEXTQUARTER,NEXTYEAR
- ✓ SAMEPERIODLASTYEAR
- ✓ YOYGrowth,QOQGrowth, MOMGrowth
- ✓ FIRSTDATE,LASTDATE

QuickMeasures

- ✓ CreatingMeasureswithoutwritingtheDAXFormulausingQuickMeasures
- ✓ SalesYoY%, SalesYTD,SalesMTD

PowerView

ReportView /PowerView

- ✓ ReportViewUserInterface/PowerBI DesktopUserInterface
- ✓ FieldsPane,Visualizationspane,FiltersPane
- ✓ Ribbon,MultipleViews,ReportCanvas,Pages Section
- ✓ Fields,FiledWells,Formatting,Analytics

VisualsInteractions

- ✓ VisualInteractions
- ✓ InteractionType(Highlight, Filter,None)
- ✓ VisualInteractionsDefaultBehavior
- ✓ ChangingtheDefaultInteractionBehavior,EditInteractions

Filtersin Power View

- ✓ Filters,FilterTypesinPowerView
- ✓ Filtersonthis Visual,FiltersonthisPage,FiltersonAll Pages
- ✓ DrillThroughFilters,CrossReportDrillThrough,Keep AllFilters
- ✓ FilterSubTypes-BasicFiltering,AdvancedFiltering,TopN,RelativeDateFiltering
- ✓ Numericfieldfilters,Textfield filters,DateandTimefieldFilters

HierarchiesandDrill-DownReports

- ✓ HierarchyIntroduction,DefaultDateHierarchy
- ✓ CreatingHierarchy,CreatingCustomDateHierarchy,ChangeHierarchyLevels
- ✓ Drill Actions-DrillDown,DrillUp,ShowNextLevel, ExpandNextLevel
- ✓ ApplyDrillDownfilterstoSelectedVisual

PowerBI Visualizations

- ✓ Visualizing Data, Why Visualizations
- ✓ Visualization types, Field Wells
- ✓ Visuals for Filtering, Visualizing Categorical Data, Visualizing Trend Data
- ✓ Visualizing KPI Data, Visualizing Tabular Data, Visualizing Geographical Data
- ✓ Leveraging Power BI Custom Visuals

Visuals for Filtering

- ✓ Slicer Visualization, When to use a Slicer
- ✓ Create and format Slicer Visualization
- ✓ Hierarchy Slicer (Custom Visualization)
- ✓ When to use a Hierarchy Slicer, Create and format Hierarchy Slicer
- ✓ Advantages of Hierarchy Slicer
- ✓ Play Axis (Dynamic Slicer) - Custom Visualization
- ✓ When to use a Play Axis Visual, Create and format Play Axis Visual

Visualizing Categorical Data

- ✓ Purpose of Pie and Donut Charts, Create and Format Pie and Donut Charts
- ✓ Purpose of Treemap Visual, Create and Format the Tree Map Visual
- ✓ Purpose of Bar & Column Charts
- ✓ Create and Format Bar and Column Charts
- ✓ Create and Format Stacked Bar Chart, Stacked Column Chart
- ✓ Create and Format Clustered Bar Chart, Clustered Column Chart
- ✓ Create and Format 100% Stacked Bar Chart, 100% Stacked Column Chart
- ✓ Purpose of Scatter Chart, Create and Format Scatter Chart

Visualizing Trend Data

- ✓ Purpose of Line and Area Charts
- ✓ Create and Format Line Chart, Area Chart, Stacked Area Chart
- ✓ Combo Charts
- ✓ Create and Format Line and Stacked Column Chart, Line and Clustered Column Chart
- ✓ Create and Format Ribbon Chart, Waterfall Chart

Visualizing KPI Data

- ✓ Create and Format Gauge Visual, KPI Visual
- ✓ Create and Format Card Visualization, Multi Row Card
- ✓ Create and Format Funnel Chart

Visualizing Tabular Data

- ✓ Create and Format Table Visual, Matrix Visualization

Visualizing Geographical Data

- ✓ Create and Format Map Visual, Filled Map Visual

Grouping,Binning &Sorting

- ✓ GroupingandBinningIntroduction
- ✓ Usinggrouping,CreatingGroupsonTextColumns
- ✓ Usingbinning,CreatingBinsonNumberColumnandDateColumns
- ✓ SortingDatainVisuals,Changing theSortColumn,ChangingtheSortOrder
- ✓ Sortusingcolumnthat isnotusedintheVisualization
- ✓ SortusingtheSortby Columnbutton

TooltipPage

- ✓ Create a ReportTooltipPage,ConfigureyourTooltipReportPage
- ✓ ManuallysettingaReportTooltip

Bookmarks,SelectionPane&Buttons

- ✓ Bookmarks,SelectionPane&Buttons
- ✓ Changingthecharttypedynamically
- ✓ ChangingtheAxisofChartDynamically

PowerBIService

PowerBIServiceIntroduction

- ✓ PowerBIServiceIntroduction,PowerBICloudArchitecture
- ✓ CloudVs.OnPremise
- ✓ CreatingPowerBIServiceAccount,SIGNINToPowerBIServiceAccount
- ✓ PowerBIPro &PowerBIPremium
- ✓ MyWorkspace&ProjectWorkspace

AddingDatasettoPowerBIServiceand CreatingMultipleNewReports

- ✓ PublishingReportstothePowerBIService,Import/GettingtheReporttoPBIService
- ✓ CreatingMultipleReportsusingDataset
- ✓ PowerBIDatasets LiveConnectionusingDesktopto CreateNewReport
- ✓ CreatingNewReportsinCloudusing Published Datasets
- ✓ SharedandCertifiedDatasets,SharingDatasetacrossMultipleProjects

DashboardsDevelopment

- ✓ Dashboard,CreatingDashboardsusingMultipleReports
- ✓ PinVisuals andPinLIVE ReportPagestoDashboard
- ✓ AdvantagesofDashboards
- ✓ InteractingwithDashboards
- ✓ AddingTilestoDashboards
- ✓ WebContent, Image, TextBox,Video
- ✓ FormattingDashboard

BuildingBlocksof PowerBI

- ✓ Datasets, Visualizations, Reports, Dashboards & Tiles

Data Connectivity Modes in Power BI

- ✓ Import, Direct Query & Connect Live / Live

Installing & Configuring the Data Gateways

- ✓ Introduction to Data Gateways, How Data Gateways work
- ✓ Connect to an on-premise data source by using a Data Gateway
- ✓ Download Data Gateway, Installing a Data Gateway
- ✓ Types of Gateways – Enterprise & Personal Gateway
- ✓ Difference Between Enterprise & Personal Gateway
- ✓ Manage Data Gateway
- ✓ Sharing the Gateway, Add and Remove Administrators
- ✓ Add Data Source, Add or Remove Users to a Data Source
- ✓ Refresh On-Premise Data
- ✓ Configuring Automatic Refresh using Schedules
- ✓ Full Refresh / Truncate & Load, Incremental Refresh the Data in Dataset

Understanding Subfolder in Workspace

- ✓ Datasets + Dataflows - Dataflows, Datasets
- ✓ Content - Workbooks, Reports & Dashboards
- ✓ All - Dataflows, Datasets, Workbooks, Reports & Dashboards

Dataflows

- ✓ Dataflows, Purpose of Dataflows
- ✓ Creating and Working with Dataflows
- ✓ Using Dataflows to Create a Dataset in Power BI Desktop
- ✓ Power BI Architecture with Dataflows

Dataset Actions

- ✓ Refresh, Schedule Refresh, Analyze in Excel, Create Report
- ✓ Delete Dataset, Get Quick Insights, Security, Rename, Settings, Download.pbix
- ✓ Manage Permissions, View Lineage

Excel Workbooks

- ✓ Import Excel Data into Power BI as Dataset
- ✓ Upload your Excel file to Power BI

Report Actions

- ✓ Share, Mark as Favorite, Analyze in Excel, Delete, Quick Insights, Save a Copy, Settings
- ✓ View usage Metrics Report, View Lineage

Dashboard Actions

- ✓ Share, Mark as Favorite, Delete, Settings, View usage Metrics Report, View Lineage

Team Collaboration in Power BI using Workspaces

- ✓ IntroductiontoWorkspaces
- ✓ ClassicWorkspaces,UpgradedWorkspaces
- ✓ CreateanWorkspace,AddMemberstoWorkspacetocollaborate
- ✓ WorkspaceAccess- Admin,Member,Contributor,ViewerRoles

SharingPowerBIContentusingBasicSharing,ContentPacksandApps

- ✓ SharingReports&DashboardsusingDirectSharing/BasicSharing
- ✓ ContentPackIntroduction
- ✓ CreateContentPack, SharingContentPacks
- ✓ SpecificGroups,MyEntireOrganization
- ✓ SelectingtheContent/ItemstoPublishorShare
- ✓ IntroductiontoApp
- ✓ PublishanApp,UpdateaPublishedApp
- ✓ ManageContentinApp,Includein App,Excludein App
- ✓ SharingApp
- ✓ EntireOrganization,Specificindividualsorgroup
- ✓ UnpublishinganApp

RowLevel Security inPowerBI

- ✓ IntroductiontoRowLevelSecurity
- ✓ RowLevelSecurity(RLS)withDAX
- ✓ ManageRoles,CreatingRoles,TestingRoles
- ✓ AddingMemberstoRolesinPowerBIService
- ✓ DynamicRowLevelSecurity
- ✓ CreatingUsersTableand Adding totheModel
- ✓ CapturingusersusingUserName()orUserPrincipalName()DAXFunctions

SyncingPublishedPowerBIReportFilesUsingOneDrive

- ✓ Refresh a DatasetstoredonOneDrive
- ✓ ScheduleRefreshtheDataset storedon OneDrive

DeploymentPipelines

- ✓ CreateaDeploymentPipeline
- ✓ AssignaworkspacettoaDeploymentPipeline

Statistics Essentials for Data Science

[Lesson 01 - Introduction](#)

- Introduction
- Introduction to Business Analytics

Lesson 02 – Sample and Population

- Sample and Population

Lesson 03 – Fundamentals of Descriptive Statistics

- Fundamentals of descriptive Statistics
- Levels of Measurement
- Categorical variables and visualization techniques for categorical variables
- Numerical Variables Using a Frequency Distribution Table
- Histogram Charts
- Cross Tables and Scatter Plots

Lesson 04 – Measures of Central Tendency, asymmetry and variability

- Measures of Central Tendency, asymmetry and Variability
- Measuring Skewness
- Measuring how the data is spread out Calculating Variance
- Standard Deviation and co-efficient of variation
- Calculating and understanding Covariance
- The correlation co-efficient

Lesson 05 – Practical Example Descriptive Statistics

- Practical example descriptive statistics

Lesson 06 - Distributions

- Distributions
- What is a Distribution
- The Normal Distribution
- The Standard Normal Distribution
- Understanding the Central Limit Theorem
- Standard Error

Lesson 07 – Estimators and Estimates

- Estimators and Estimates
- Confidence Intervals – an invaluable tool for Decision making
- Calculating confidence intervals within a population with a know variance
- Student's T Distribution
- Calculating Confidence Intervals within a population with an unknown variance
- What is a Margin of error and why is it important in statistics

Lesson 08 – Confidence Intervals Advanced Topics

- Confidence Intervals Advanced Topics
- Calculating Confidence Intervals for Two Means with Independent samples(Part One)
- Calculating Confidence Intervals for Two Means with Independent samples(Part Two)

- Calculating Confidence Intervals for Two Means with Independent samples(Part Three)
- Lesson 09 – Practical Example Inferential Statistics
- Practical Example Inferential Statistics

SQL Essentials for Data Science

Lesson 01 – Introduction

- Course Overview

Lesson 02 – Installation and getting started

- Installation

Lesson 03 – Case Study Demo

- Case study part one
- Case study part two

Lesson 04 – Fundamental SQL statements

- CREATE
- Exercise one Create DB and Table
- INSERT
- Import data from File
- Exercise two Inserting and importing
- SELECT Statement
- SELECT DISTINCT
- WHERE
- Logical Operators
- Exercise three SELECT and WHERE
- UPDATE
- DELETE
- ALTER
- Exercise four Updating Table

Lesson 05 – Restore and Back-up

- Restore and Back-up
- Exercise five Restore and Back up

Lesson 06 – Selection commands Filtering

- IN
- BETWEEN
- LIKE
- Exercise six In Like and Between

Lesson 07 – Selection commands Ordering

- Side Lecture Commenting in SQL
- ORDER BY

- LIMIT
- Exercise 7 Sorting

[Lesson 08 – Alias](#)

- AS

[Lesson 09 – Aggregate Commands](#)

- COUNT
- SUM
- AVERAGE
- MIN and MAX
- Exercise eight Aggregate functions

[Lesson 10 – Group by Commands](#)

- GROUP BY
- HAVING
- Exercise nine Group By

[Lesson 11 – Conditional Statement](#)

- CASE WHEN

[Lesson 12 – Joins](#)

- Introduction to Joins
- Inner Join
- Left Join
- Right Join
- Full Outer Join
- Cross Join
- Except
- Union
- Exercise ten Joins

[Lesson 13 – Subqueries](#)

- Subqueries
- Exercise eleven Subqueries

[Lesson 14 – Views and Indexes](#)

- VIEWS
- INDEX
- Exercise twelve Views

[Lesson 15 – String Functions](#)

- LENGTH

- UPPER LOWER
- REPLACE
- TRIM, LTRIM, RTRIM
- CONCATENATION
- SUBSTRING
- LIST AGGREGATION
- Exercise thirteen String Functions

[Lesson 16 – Mathematical Functions](#)

- CEIL and FLOOR
- RANDOM
- SETSEED
- ROUND
- POWER
- Exercise fourteen Mathematical

[Lesson 17 – Date – Time Functions](#)

- Current DATE and TIME
- AGE
- EXTRACT
- Exercise fifteen Date – time functions

[Lesson 18 – PATTERN \(STRING\) MATCHING](#)

- PATTERN MATCHING BASICS
- ADVANCE PATTERN MATCHING (REGULAR EXPRESSIONS)
- Exercise sixteen Pattern Matching

[Lesson 19 – Data Type conversion](#)

- Converting Numbers Date to String
- Converting String to Numbers Date

[Lesson 20 – User Access Control Functions](#)

- User Access Control

[Lesson 21 – Bonus Section Nail that Interview](#)

- Tablespace
- PRIMARY KEY and FOREIGN KEY

[Lesson 22 – Bonus Section Nail that Interview](#)

- EXPLAIN
- Soft Delete Vs Hard Delete
- Update Vs Case
- VACCUM
- Truncate vs Delete
- STRING FUNCTIONS
- JOINS
- SCHEMAS

Lesson 23 – Bonus Section Database Basics

- What is SQL
- Tables and DBMS
- Types of SQL commands
- PostgreSQL

ADDON

- ✓ Real-timeProjectExplanation
- ✓ ResumePreparation,PowerBIDeveloperRoles&Responsibilities
- ✓ InterviewQuestionsDiscussions
- ✓ MockInterviews

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