

SAP ABAP on HANA

DAY 1

DICTIONARY OBJECTS

- Standard Database tables
- Types of DB tables
- Client Dependent Tables
- Client Independent Tables
- Table creation minimum settings
- Table creation using direct data types
- Table creation using data elements and domains
- Check Tables and Value Tables
- Views
- View Cluster
- Lock objects
- Type-Groups
- Table Types
- Search Helps

DAY2

SAP ENHANCEMENTS

Customer-Exits

- Identifying Customer Exits
- Function Exits
- Menu Exits
- Screen Exits

BADI's

ENHANCEMENT FRAMEWORK

- Enhancement SPOTS
- Enhancement Implementations
- KERNEL BADI's
- Source-Code Enhancement
- Function Group Enhancement
- Class Enhancement

DAY3

OOPS CONCEPTS

- Features of OOPS concepts
- Introduction to CLASS and OBJECT
- Difference between structures and

classes

- Creation of Classes in different

Programming Languages

- Types of ABAP Classes
- Class-Components
- Visibility Sections
- Local Class Creation
- Global Class Creation using
CLASS BUILDER Tool
- Instance and Static Attributes
- Instance and Static Methods
- RETURNING keyword / Parameter
- Exception Handling (Local & Global)
 - o Standard Exceptions
 - o Try and Catch Blocks
 - o Standard Exception Messages

- o User Defined Exceptions
- o Raising Keyword
- o CLEANUP Block
- o Hierarchy of Exceptions
 - ME Keyword
 - LOAD keyword
 - Converting Local class to Global

Class

DAY4

- Constructors
 - o Instance Constructors
 - o Static Constructors
 - o Parameters to Constructors
 - o Class Loading
- Inheritance (Local & Global)
 - o Types of Inheritance
 - o Hierarchy of Constructor

execution

- Exception Classes with OTR
- Exception Classes with Message

classes

- Polymorphism
 - o Method Overloading
 - o Method Overriding
 - o REDEFINITION Keyword
 - o SUPER Keyword
- Final Classes and Final Methods
- Abstract Classes (Local & Global)
- Interfaces (Local & Global)

ABAP ON HANA

DAY5

Role of ABAP consultants in SAP HANA

Data to Code Vs Code to Data Approach

Introduction to HANA Studio

Native HANA Development

Introduction to SQL and Database Objects

Schema

Row Store Table Vs Column Store Table

Database Tables – CRUD Operations

DAY6

Transaction Control Statements

Order By, Group By, Having, Where Clauses

Primary key and Foreign Key Constraints

Global Vs Local Temporary Tables

Defining and Managing Triggers

Sequences

Synonyms

Altering Database Objects

Table Types

Procedures

Functions

Temporary Internal Tables

DAY7

Conditional and Looping statements

Cursors

Exception Handling

Views

Arrays

Joins

Indexes

SQL Functions

STORED PROCEDURES

Creating Stored Procedures

Creating Database Procedure Proxies

Consuming Stored Procedure from ABAP Reports

Scalar Functions

Table Functions³

DAY8

ADBC (ABAP DATABASE Connectivity)

Introduction to ADBC Framework

Consuming Select Queries in ABAP Reports using ADBC

Parameter Binding in Queries using ADBC

Consuming Stored Procedures using ADBC

Parameter Binding in Stored Procedures using ADBC

Accessing DDL and DML statements using ADBC

DAY9 - DAY10

AMDP (ABAP Managed Database Procedures)

Introduction to AMDP and ADT

Creating AMDP's

Consuming AMDP's from ABAP Reports

AMDP Vs Stored Procedures

Passing Parameters to AMDP

Select-option functionality in AMDP

DAY 11

IDA (Integrated Data Access)

Traditional ALV Vs ALV IDA

Report Development using ALV IDA

Manipulating Field catalog and Toolbar in ALV IDA

Parameters and Select-Options in ALV IDA

DAY 12 DAY 13

CDS (CORE DATA Services)

Introduction and Components of CDS Views

CDS simple views

Consuming CDS views from ABAP Reports and ALV IDA Reports

CDS views with parameters

Interactive ALV

Select-option functionality in CDS views

CDS Views with Functions and Arithmetic Expressions

CDS Views with Joins and Associations

CDS view Table Functions

Exposing CDS Views as ODATA Service

CDS View Extension