



SAP Advanced Business Application Programming (ABAP)

1. Introduction to SAP

- Introduction & Overview of SAP
- SAP modules at a Glance

2. ABAP Dictionary Concepts

- Tables, Data Elements and Domains
- Transparent, Pooled and clustered tables
- Buffering, Indexes etc.
- Structure, Table types and Type pools
- Views, Search helps and Lock objects

3. Data Types

- Character, Integer
- Numeric Character
- Floating Point
- Packed Decimals
- Time, Date, Strings

4. Loops & Branches

- Do, Do n times, While
- If, If Else, if Ladder, Case
- Small Programs
- Factorial program
- Indentation
- Code Inspector
- Extended Program Check

5. ABAP Programming Basics

- I/O Statements, Formatting commands
- String and Date operations and System fields
- Fields Strings
- Text Elements
- Open SQL statements and performance issues
- Messages (Creating and Calling etc.)
- Modularization (Subroutines, Function Modules and Includes)
- Field Symbols
- Debugging programs (Break Point, Watch points etc.)
- Extended syntax check
- Runtime Analysis, Performance Trace

6. Structures & Internal Tables

- Over View of Structures
- Similar Structures creation
- Different Structures
- Different structures with Extra Fields
- Over View of Internal Tables
- Similar Internal tables creation
- Different Internal tables
- Different Internal tables with Extra Fields
- Modify Operation on Internal Table
- Delete Operation on Internal Tables
- Sorting Of internal tables (Sort)
- Searching Techniques Of internal Table

7. Modularization Techniques

- Over view of Modularization
- Macros
- Includes
- Subroutines
- Function Modules

8. Reports

- Classical Report Events
- Control Level Commands (AT First, AT New etc).,
- Selection Screen: Parameters
- Select options and variants
- Selection screen designing
- Interactive report events
- Menu painter: Designing and calling GUI Status
- System fields of reports
- ALV reporting

9. Module Pools

- Overview of Module pools
- Creation of Create button
- Creation of Display

- Creation of Sub screens
- Creation of Tab Strip
- Creation of Table Control
- Creation of Save button to update Data Base

10. Dialog Programs

- ABAP Memory and SAP Memory
- LUW and Update bundling technique
- Screens, flow logic events and Module pool
- Basic Screen elements (I/O field, Radio buttons and Check box etc.,)
- Maintaining screen sequences (Set screen, Call Screen and leave to screen)
- Calling Programs (Submit, Call Transaction)
- Sub screens and modal Screens
- Table Controls, and Tabstrips

11. File Handling

- Data Transfer Scenarios and methods
- BDC session method (Creating, Processing, Analyzing and Correction errors in Sessions)
- Recording Technique
- BI Session features, Status and OK codes
- Call Transaction method (Options, Tracing errors and Correction)
- Background Processing (Creating, Scheduling and Monitoring Jobs)

12. SAP Scripts

- Form designing (Pages, Windows, Page windows and Paragraphs etc.)
- SAP Script symbols
- Control commands
- Standard Text and Styles
- Inserting Logos (TIFF and Bitmap images)
- Modifications to Form and Print program
- Debugging, copying forms etc.

13. Smart Forms

- Smart form and Form Logic
- Calling a Form from print program
- Different types of nodes (Page, Table, Loop etc)
- Difference between SAP Script and Smart Forms

14. Enhancements

- Changing SAP Standard
- User Exits and Customer exits
- Implementing Function, Menu, Screen exits
- BADI

15. ALE

- Distributed Systems
- ALE Services and features
- ALE Inbound and Outbound process
- ALE Configuration (Logical systems, RFC, Model view, Port, Partner Profiles etc)
- ALE Distribution Scenarios

16. IDOC

- Features and structure of IDOC
- Idoc type and Message type
- Segment definition and components
- Creating Segments
- Creating Idoc types (Basics Type nd Extension)
- Crating Message types and Process codes
- Developing Selection and Posting programs
- Idoc Enhancements

17. RFC

- Introduction of RFC
- Communication mechanisms through RFC
- ABAP interfaces (RFC, tRFC, ARFC)
- Difference between tRFC and ARFC

18. ALV (ABAP List Viewer)

- Over view of ALV
- ALV List Display
- ALV Grid Display
- ALV Catalog Creation

19. LSMW

- Overview of LSMW
- Creation of Project, Sub Project, Object Type
- Creation of Batch Input Using Recording Mode
- Steps To Create LSMW

20. Work Flow

- Over view of Work Flow
- Creation of prefix
- Creation of Standard tasks
- Creation of Standard Template
- Creation of Workflow builder

21. BAPI

- SAP Business Objects
- Business Object Builder and BOR
- Features and applications of BAPI

- Creating Business Object types •
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- Developing BAPIs Working with a standard BAPI •