

BC405

Programming ABAP Reports

COURSE OUTLINE

Course Version: 18

Course Duration:

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Typographic Conventions

American English is the standard used in this handbook.

The following typographic conventions are also used.

This information is displayed in the instructor's presentation	
Demonstration	
Procedure	
Warning or Caution	
Hint	
Related or Additional Information	
Facilitated Discussion	
User interface control	<i>Example text</i>
Window title	<i>Example text</i>

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Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Developer
- Technology Consultant

Lesson 1: Using Standard Reports

Lesson Objectives

After completing this lesson, you will be able to:

- Identify reporting solutions
- Compare reporting solutions
- Compare the SAP List Viewer (ALV) and classic ABAP list
- Explain accessibility

Lesson 2: Implementing a Simple List

Lesson Objectives

After completing this lesson, you will be able to:

- Structure a program using Includes
- Create lists with the WRITE statement

Lesson 1: Implementing a Selection Screen

Lesson Objectives

After completing this lesson, you will be able to:

- Explain selection screens
- Create parameters on selection screens
- Create input fields with the SELECT-OPTIONS statement
- Initialize a selection screen
- Change the design of a selection screen

Lesson 2: Implementing Multiple Selection Screens

Lesson Objectives

After completing this lesson, you will be able to:

- Create additional selection screens
- Define tabstrips on selection screens

Lesson 3: Implementing Input Checks and Creating Variants

Lesson Objectives

After completing this lesson, you will be able to:

- Implement input checks
- Implement field and value help
- Create a variant

Lesson 4: Modifying the Selection Screen at Runtime

Lesson Objectives

After completing this lesson, you will be able to:

- Generate buttons on selection screens
- Change selection screens at runtime

Lesson 1: Using ALV Functionality

Lesson Objectives

After completing this lesson, you will be able to:

- Display data with the SAP List Viewer (ALV)

Lesson 2: Preparing the Container Screen for an ALV Grid Control

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the control framework
- Create the container screen
- Program the screen flow logic for screen processing

Lesson 3: Displaying Data using an ALV Grid

Lesson Objectives

After completing this lesson, you will be able to:

- Instantiate and link ALV objects
- Display data in the ALV grid control

Lesson 1: Programming Layout Variant Functionality in the ALV Grid

Lesson Objectives

After completing this lesson, you will be able to:

- Program layout variant functionality in the ALV Grid

Lesson 2: Changing the Layout of the ALV Grid

Lesson Objectives

After completing this lesson, you will be able to:

- Adapt the layout of the ALV Grid
- Display an exception column in the ALV Grid
- Define the sort criteria in the ALV Grid

Lesson 3: Adapting the Appearance of the ALV Grid

Lesson Objectives

After completing this lesson, you will be able to:

- Color lines in the ALV Grid
- Color the cells in the ALV Grid
- Hide standard functions of the ALV Grid Control

Lesson 4: Adapting the ALV Grid Control using the Field Catalog

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the field catalog
- Set column properties using the field catalog

Lesson 1: Handling Events of the ALV Grid Control

Lesson Objectives

After completing this lesson, you will be able to:

- Describe events in the control framework
- Handle events
- Create and register event handlers

Lesson 2: Handling Additional Events of the ALV Grid

Lesson Objectives

After completing this lesson, you will be able to:

- Implement custom functions for the ALV Grid
- Handle print list events for the ALV grid control

Lesson 3: Calling Additional Methods of the ALV Grid

Lesson Objectives

After completing this lesson, you will be able to:

- Identify appropriate methods for ALV Grid tasks
- Implement method calls for the ALV grid control

Lesson 4: Implementing Context Menus for the ALV Grid

Lesson Objectives

After completing this lesson, you will be able to:

- Implement context menus

Lesson 1: Explaining the Functionality of Logical Databases

Lesson Objectives

After completing this lesson, you will be able to:

- Explain logical databases

Lesson 2: Retrieving Data using Logical Databases

Lesson Objectives

After completing this lesson, you will be able to:

- List the components of logical databases
- Use logical database events
- Describe logical database selection screens

Lesson 3: Using Advanced Functionality of Logical Databases

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the program flow of logical databases
- Declare additional selection screen objects when using logical databases

Lesson 1: Reading Data from Multiple Database Tables

Lesson Objectives

After completing this lesson, you will be able to:

- List techniques to read data from multiple database tables
- Read data using database views
- Read data using inner joins
- Read data using outer joins
- Read data using FOR ALL ENTRIES
- Read data using nested SELECT statements

Lesson 2: Implementing Aggregate Functions and Grouping in a SELECT Statement

Lesson Objectives

After completing this lesson, you will be able to:

- Implement aggregate functions in SELECT statements
- Implement GROUP BY in SELECT statements

Lesson 3: Implementing HAVING and ORDER BY Clauses in SELECT Statements

Lesson Objectives

After completing this lesson, you will be able to:

- Implement a HAVING clause in SELECT statements
- Implement an ORDER BY clause in SELECT statements

Lesson 1: Calling Programs and Passing Data

Lesson Objectives

After completing this lesson, you will be able to:

- Call other programs from ABAP reports
- Explain memory management
- Pass data between programs

Lesson 1: Performing Background Processing

Lesson Objectives

After completing this lesson, you will be able to:

- Perform background processing
- Explain how an ALV Grid influences background processing

Lesson 1: Displaying Data with the ALV Object Model

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the ALV Object Model
- Display data using the ALV Object Model

Lesson 2: Adapting the ALV Object Model Output

Lesson Objectives

After completing this lesson, you will be able to:

- Change the output when using the ALV Object Model
- Change the content and structure when using the ALV Object Model

Lesson 3: Adapting the Properties of an ALV

Lesson Objectives

After completing this lesson, you will be able to:

- Change the properties of an ALV created using the ALV Object Model