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IBM COBOL

MVS & VM Coding Fundamentals

FA-0242 · 2-day

Mainframe & Enterprise Systems

Introduction

The 2-day course, "IBM COBOL for MVS & VM Coding Fundamentals," is designed to provide participants with a solid foundation in COBOL programming for Mainframe Virtual Storage (MVS) and Virtual Machine (VM) environments. The course covers essential programming techniques, such as coding program divisions, file handling, data transfer, and PERFORM statements. Additionally, participants will learn to identify compiler outputs and options, as well as create COBOL programs for MVS and VM systems.

Learning outcomes

Upon successful completion of this course, participants will be able to:

- Understand the fundamentals of COBOL programming for MVS and VM environments.
- Code COBOL program divisions effectively.
- Implement file handling, data transfer, and PERFORM statements in COBOL programs.
- Identify compiler outputs and options for optimal program performance.
- Create, compile, and execute COBOL programs for MVS and VM systems.

Training outline

1. Day 1:

Introduction to IBM COBOL for MVS & VM

- Overview of COBOL programming
- Role of COBOL in MVS and VM environments

COBOL Program Structure and Divisions

- Identification Division
- Environment Division
- Data Division
- Procedure Division

File Handling in COBOL

- Sequential, Indexed, and Relative file organizations
- File control and I/O operations
- File status handling

Data Transfer and Manipulation

- MOVE and INITIALIZE statements
- Arithmetic operations
- String handling and manipulation

- Exercise: Creating a basic COBOL program

2. Day 2:

PERFORM Statements in COBOL

- Types of PERFORM statements
- Nested and inline PERFORMs
- Implementing loops and conditional execution

Compiler Outputs and Options

- Understanding compiler outputs
- Interpreting error messages
- Utilizing compiler options for optimal performance

Advanced COBOL Coding Techniques

- Working with tables and arrays
- Implementing subprograms and functions
- Utilizing SORT and SEARCH operations

- Exercise: Developing a more complex COBOL program
- Best Practices and Debugging Techniques
- COBOL programming best practices
- Debugging and troubleshooting COBOL programs
- Course Review and Q&A

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