

Assembler Language – Intermediate

Course Summary

Description

This class is an intermediate level course in Assembler Language programming. Topics include an introduction into subroutines, interruptible instructions and indexing.

Topics

- Assembler Language Program Structure
- Using Instructions with Indexes and Masks
- Instructions
- Arithmetic Instructions
- Basic I/O Operations
- Calling external programs

Audience

This class is intended for experienced programmers who have a good understanding of basic OS/390 architecture

Prerequisites

Students should have taken the Assembler Language Introduction course and have experience with TSO/ISPF and JCL.

Duration

Five days

Assembler Language – Intermediate

Course Outline

I. Assembler Language Program Structure

- A. Review register conventions
- B. Review data definitions; introduce address constants (ADCON and VCON).
- C. CSECT and DSECT usage
- D. Using multiple base registers

II. Using Instructions with Indexes and Masks

- A. LOAD instructions.
- B. Data arrays and tables

III. Instructions

- A. Test Under Mask
- B. Insert/Store character instructions
- C. Shift instructions.

IV. Arithmetic Instructions

- A. Floating-point operations

V. Basic I/O Operations

- A. Review QSAM file processing
- B. Introduction to BSAM processing

VI. Calling external programs

- A. CALL, LOAD, LINK, and XCTL instructions.
- B. Use of WAIT/POST macros.
- C. Managing subtasks