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
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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