

AS06: System i RPG IV Version 5 Programming Fundamental Workshops

Course code	AS06VN	Delivery type	Classroom (Hands-on labs)
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Duration	4.0 days	Course type	Public or Private on-site
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List price	Call for price
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This course teaches the basics of the System i (iSeries) RPG IV programming language. It is the first of three courses that should be attended in sequence. This class is a comprehensive exposure to the basic features and functions of RPG IV for Version 5. It does not introduce either information processing or programming in general. Students who are new to programming should attend other classes that are offered by local technical colleges or self-study methods. This class is designed to enable a trained programmer to develop and maintain simple RPG IV programs written using the latest features and techniques available in the Version 5 compiler.

Audience

This course is the first in a series of three classes designed for programmers who are new to RPG IV. Basic programming experience is required. The student should have attended at least an introductory course to programming such as one of those available at technical colleges. The student is not taught the concepts of programming. Experienced programmers who are new to i5 (iSeries) should also attend this class. Examples of other programming languages are BASIC, COBOL or RPG II. This class is not designed for RPG III programmers who want to learn RPG IV. The Moving from RPG/400 to i5 (iSeries) RPG IV class (OE85/S6126) is designed to satisfy this need, when it is available in your geography. This course is too basic for experienced RPG III programmers. If OE85/S6126 is not offered in your geography, you should attend this class instead.

Notes:

The term RPG/400 refers to both System/38 RPG as well as i5 (iSeries) (AS/400) RPG/400 (aka. RPG III). This course focuses entirely on the features of the RPG IV Version 5 compiler and the techniques that this compiler provides. Features of V5 are

discussed. Previous techniques and the maintenance of programs written using legacy techniques, such as fixed format calculations, are not covered in the classroom. Some additional material and the bibliography will assist the new RPG IV programmer in the maintenance of legacy applications.

Pre-requisites

Before attending this course, the students should be able to:

Use a Windows-based PC

Run PC applications using menus, icons, tool bars, and so forth

Write a simple program in another high-level language (for example, COBOL, BASIC or RPG II)

Use basic i5/OS (OS/400) tools including:

- CL commands
- Online Help
- WRKSPLF and related commands to manage output
- WRKJOB, DSPMSG, DSPJOB commands and so forth to perform basic problem determination

Use and display i5 (iSeries) print queues

Use the Program Development Manager/Source Entry Utility or the WDSC editor to create and maintain DDS

Create and maintain physical and logical files

Students must have attended these courses:

- *Introduction to System i for New Users (OE98/S6108)*
- *Application Programming Facilities Workshop for System i (OL49/S6149)*

Attendance at System i Application Development using WDSC (AS86/S6586) is strongly recommended. Experience with Printer and Display files prior to attending this class is beneficial as well.

Objective

After completing this course, you should be able to:

- Write RPG IV version 5 programs to produce reports
- Write simple RPG IV version 5 inquiry programs that interact with displays
- Review compilation listing, find and correct compilation errors
- Maintain existing applications written in the RPG IV (version 5) language
- Use the Debugger tool to determine the cause of incorrect results

- Use many popular RPG IV Built in Functions

Key topics

Day 1

- Unit 1 - Welcome and administration
- Unit 2 - RPG IV introduction
- Unit 3 - Coding specifications for RPG IV

Day 2

- Unit 4 - Coding specifications for RPG IV (Cont)
- Unit 5 - Data representation and definition
- Unit 6 - Manipulating data in calculations

Day 3

- Unit 7 - Printing from an RPG IV program
- Unit 8 - Using the debugger
- Unit 9 - Structured programming and subroutines

Day 4

- Unit 9 - Structured programming and subroutines (Cont)
- Unit 10 - Accessing the DB2 database using RPG IV
- Unit 11 - Coding inquiry programs
- Unit 12 - What's next?