

# RPG IV Programming Fundamentals Workshop for IBM i AS06GAM

## **Course Description:**

Course RPG IV Programming Fundamentals Workshop for IBM i (AS06G) teaches the basics of the IBM i RPG IV programming language. It is the first of two courses that should be attended in sequence.

This course is a comprehensive exposure to the basic features and functions of RPG IV for Version 7. It does not introduce either information processing or programming in general. Students who are new to programming should attend other courses that are offered by local technical colleges or self-study methods.

This course 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 7 compiler.

## **Course Objectives:**

- Write RPG IV version 7.3 programs to produce reports
- Write simple RPG IV version 7.3 inquiry programs that interact with displays
- Review compilation listing, find and correct compilation errors
- Maintain existing applications written in the RPG IV Version 7.3 language
- Use many popular RPG IV built-in functions

## **Prerequisites:**

You should be able to:

- Use a Windows-based PC
- Run PC applications using menus, icons, toolbars, and so forth
- Write a simple program in another high-level language (for example, CL, COBOL, BASIC, or RPG II)
- Use basic IBM i 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 IBM i print queues
- Use the RSE/LPEX Editor to create **and** maintain DDS
- Create **and** maintain physical **and** logical files

You must have attended these courses:

- *Introduction to IBM i for New Users (OE98G)*

**Audience:**

This course is the first in a series of two courses 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 the Power System with IBM i should also attend this course. Examples of other programming languages are BASIC, COBOL, or RPG II.

This course focuses entirely on the features of the RPG IV Version 7 compiler and the techniques that this compiler provides. Features of V7 are discussed.

Previous techniques and the maintenance of programs that are 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.

**Course Duration:**

4

**Course Topics:**

- RPG IV introduction
- Coding specifications for RPG IV
- Data representation and definition
- Manipulating data in calculations
- Using printer and display files in an RPG IV program
- Structured programming, error handling, subprocedures, and subroutines
- Using arrays, data structures, and data areas
- Accessing the DB2 database using RPG IV

- What's next?