# Chapter 1: Designing and Debugging Programs

You will learn:

- Debugging process - principles and steps.
- How to recognize, isolate, and identify bugs.
- Determine a fix for the bug.
- Steps to reduce debugging.
- Steps in the debugging process.
- Program design and a well-designed program.
- Designing programs prior to coding.
- Coding guidelines.
- Logical control structures.
- Debugging guidelines.
- Syntax errors.
- Logic errors.

# Chapter 2: Dumps: Introduction

You will learn:

- z/OS operating system and entry point address.
- Understand abends - job logs, completion codes, and dump fields.
- Analyze a dump.
- Finding the content of fields.
- Multi-modular dumps.
- Linkage Editor Report.
- Save area chain.
- TGT: Task Global Table.
### Chapter 3: Enterprise COBOL Debugging

You will learn:

- Approaches to problem determination.
- Debug tool.
- Source language debugging.
- Tracing program logic.
- Finding and handling input-output errors.
- Debugging statements and using compiler options.
- Compiler messages - severity levels.
- MAP output - data types.
- LE: Language Environment - dumps.
- Messages and abends.
- Condition handling.

### Chapter 4: Abend-AID Facilities and Features

You will learn:

- Abend-AID facilities.
- Extended Language support.
- Abend-AID database support.
- SNAP-AID support.
- Application program failure - process.
- Abend-AID control structure levels - six.
- IBM Dump provision.
Chapter 5: Diagnosing Errors: Abend-AID

You will learn:

- Diagnosing a COBOL data-related error.
- Resolving an S0C7 with basic language support.
- Determining index and indexed field values.
- COBOL indexes.
- Error Analysis section.
- Searching program storage.
- Assembler data-related error - resolving an S0CB.
- Abend-AID for IBM DB2 database.
- Report types.
- SNAP-AID for reporting negative SQL codes.
- Abend-AID DD statements.
- Processing control.
- Specifying wide output.