

Chapter 1: Introduction
You will learn: <ul style="list-style-type: none">• The advantages and disadvantages of working in the PL/I environment.• Characteristics of a well designed program and how PL/I meets such goals.• PL/I features in debugging, I/O, and data types.• Rules of a PL/I program.
Chapter 2: Declaring Data Items and Representation
You will learn: <ul style="list-style-type: none">• How to declare PL/I variables with scale, base and mode.• Internal representation of numeric, character and varying character strings.• Differences between the number types and which types to use for a particular circumstance.• Declaring and using bit strings.• How to initialize a variable in the DECLARE statement.• How to format data items for printing or for writing to a dataset.• How to code the PICTURE specification in a DECLARE statement.
Chapter 3: Basic Statements
You will learn: <ul style="list-style-type: none">• Different types of operators: arithmetic, comparison, bit and string.• To work with several different constants.• Rules and suggestions for coding identifies.• Coding the assignment statement.• Operator precedence rules.• Working with string operators.• Coding bit expressions.• Coding IF/ELSE, DO Loops, Nested IF, Nested DO loops and the SELECT statement.
Chapter 4: Stream I/O
You will learn: <ul style="list-style-type: none">• Differentiate between stream and record I/O.• Declaring stream datasets.• Coding the OPEN, CLOSE, GET and PUT.• List directed I/O.• Data directed I/O.• Edit directed I/O.

Chapter 5: Subroutines, Functions, and Storage Class

You will learn:

- The uses of program blocks, variable scope and global and local variables.
- Use of procedure blocks to delimit code.
- Differences between an internal and external subroutine.
- To code the PROC statement.
- To terminate a procedure.
- Benefits of the different storage classes including automatic, static, controlled and based.

Chapter 6: Structures and Record I/O

You will learn:

- To design and code a record.
- To code a record for printing reports.
- To overlay data items in a structure.
- To code structure assignment statements.
- Alignment of the various data fields in a record.
- To declare a record I/O dataset.
- To open, close, read and write a sequential dataset.
- To open, close, read, and write a VSAM dataset (optional).

Chapter 7: Using Arrays

You will learn:

- To declare and initialize an array.
- To use the Iteration factor in initializing an array.
- To use the repetition factor in initializing a string array.
- To use DO loops with an array.
- To define array sizes.

Chapter 8: Functions

You will learn:

- PL/I built-in functions.
- To declare a built-in function.
- String manipulation built-in functions.
- To code arithmetic built-in functions.
- To code the SORT utility in PL/I.
- To code procedures including BEGIN blocks, subroutines and functions.
- To invoke procedures and pass data.

Chapter 9: ON- Units and Exceptional Conditions

You will learn:

- The actions to take when an exceptional condition occurs.
- To handle the different types of exceptions.
- To code an ON UNIT.
- To use the SYSTEM action.
- To enable and disable conditions.
- To use condition prefixes.
- Condition handling built-in functions.

Chapter 10: Miscellaneous Topics

You will learn:

- Common errors.
- Use of the preprocessor.
- Passing a PARM from an EXEC card to a PL/I program.
- Debugging techniques.