NASA TECH BRIEF

Langley Research Center

Characteristics of FORTRAN

A publication is available which outlines the source program differences between the IBM 360, UNIVAC 1108, CDC 6000, and Honeywell Series 32 computer systems.

This publication can be used as a guide by the programmer in converting an existing program from one computer system to another. A handy minimal language concept, which is inserted where feasible, provides a set of instructions compatible with all four computer systems. It can be used as a guide for writing a program which will be accepted by all four of the systems.

These computer systems accept source programs that differ in at least three ways:

1. In the least significant aspect, there are variations in permissible numbers sizes;
2. There are some features of FORTRAN that are not present in all implementations; and
3. Some implementations go beyond the standard.

In this publication, the differences are identified, and methods of circumventing the problem areas are explained.

Programming guidelines, which were used in developing a FORTRAN IV CDC 6400/6500 program that was subsequently converted to FORTRAN V for the UNIVAC 1108 computer, are also presented.

Notes:

Requests for further information may be directed to:

Technology Utilization Officer
Langley Research Center
Mail Stop 139-A
Hampton, Virginia 23665
Reference: B73-10322

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