
FORTRAN

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ABSTRACT

1 Introduction

2 History

Fortran was initially developed by IBM to provide developers working on the IBM 704 Mainframe Computer with an alternative to assembly language. Because of hardware limitations at the time (1952-1956) Fortran prioritized performance with its the first Fortran compiler being an optimizing compiler, which brought its performance significantly closer to programs written with assembly language. Fortran's primary focus is scientific computing, primarily in use in scientific research and engineering.

Today, Fortran, although significantly less popular than in previous decades, is still a supported language, with revisions as recent as 2018. Its reach, however, has spread to encompass much more than its own development, but has also built a foundation for a number of dialects and entirely new languages, including BASIC.

3 Control Structures

4 Data Types

5 Subprograms

6 Summary