
FORTAN BY TRAN

A PREPRINT

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March 26, 2020

ABSTRACT

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Keywords First keyword · Second keyword · More

1 Introduction

2 History

The history of Fortran is very different from the history of many high-level languages, because FORTRAN was the first high-level language, using the first compiler ever developed. Fortran was developed by a team of programmers at IBM led by John Backus, and was first published in 1957. At first, one might be surprised why anyone would develop a language like Fortran when it reduces the execution efficiency by 20 compared to assembly language, but the programmers at IBM saw a bigger picture which would change the way of writing programs for complex mathematical expressions for a long time in future and is also simple for people to learn. Yes, the big advantage was that unlike assembly, everyone found Fortran very easy to learn and code 500 faster than before. This revolutionary language was one of the big stepping stones because it was not just the first high-level language, but also because it introduced one of the greatest concepts to the field of Computer Science, The Compiler Theory.

Due to its different dialects, Fortran faced a lot of criticism and had to be revised more number of times than you would imagine. Although they released a standardized version in 1966 as FORTRAN '66, they had to review it again in 1978 due to new dialects being surfaced, but in 1990 a new fortran came into existence with a lot more features and blended into the new age programming perfectly fine. Today, FORTRAN '90 still stands high in the list due to various reasons and one of the most important ones being the knowledge transfer IBM has managed to have. Almost every old age programmer knows Fortan and at a stage even new age programmers become familiar with it due to the usage of the language by many big companies like Intel, Android and HP. It is not just the language and the software but also its impact on the hardware such as the Raspberry Pi, which contributes towards the success of Fortran in the field of Computer Science.

3 Control Structures

4 Data Types

5 Subprograms

6 Summary

<https://www.ctan.org/pkg/booktabs>

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