
**Information technology — Guidance
for the use of database language
SQL —**

**Part 7:
Polymorphic table functions**

*Technologies de l'information — Recommandations pour l'utilisation
du langage de base de données SQL —*

Partie 7: Fonctions de table polymorphes

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Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management and interchange*.

This first edition of ISO/IEC 19075-7 cancels and replaces ISO/IEC TR 19075-7:2017.

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- ISO/IEC 9075-9, fifth edition or later;
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Introduction

The organization of this document is as follows:

- 1) **Clause 1, “Scope”**, specifies the scope of this document.
- 2) **Clause 2, “Normative references”**, identifies additional standards that, through reference in this document, constitute provisions of this document.
- 3) **Clause 3, “Terms and definitions”**, defines the terms and definitions used in this document.
- 4) **Clause 4, “Introduction to polymorphic table functions”**, provides an introduction to polymorphic table functions, the requirements leading to their incorporation into SQL, and illustrations of their use.
- 5) **Clause 5, “PTF processing model”**, describes the abstract processing model for polymorphic table functions in the context of an SQL-implementation.
- 6) **Clause 6, “Specification”**, describes the manner in which polymorphic table functions are specified in the SQL standard.
- 7) **Clause 7, “Data definition language”**, provides the syntax and semantics of the SQL statements that create, modify, and drop polymorphic table functions.
- 8) **Clause 8, “Implementation”**, guides authors of polymorphic table functions through the steps required to create all of the functions necessary to accomplish particular purposes.
- 9) **Clause 9, “Invocation”**, supplies the information necessary for application writers, especially SQL query authors, to take advantage of the polymorphic table functions that are available to them.
- 10) **Clause 10, “Compilation”**, is directed at the authors of polymorphic table functions and of SQL database systems to guide them in the steps required to compile polymorphic table functions in the context of a particular SQL-implementation.
- 11) **Clause 11, “Optimization”**, describes the various aspects of polymorphic functions of which the authors of such functions and the authors of SQL-implementations must be aware to adequately optimize the execution of such functions.
- 12) **Clause 12, “Execution”**, discusses the details of executing polymorphic table functions in the context of the processing model.
- 13) **Clause 13, “Examples”**, supplies numerous examples in detail with commentaries to explain the various use cases, the requirements that relate to polymorphic table functions, and the specifics of the solutions for each use case.