

**BUREAU OF INDIAN STANDARDS**  
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**मसौदा भारतीय मानक**  
**सूचना प्रौद्योगिकी- डाटाबेस भाषा -एसक्यूएल**  
**भाग 1 रूपरेखा (एसक्यूएल / रूपरेखा)**  
**(पहला पुनरीक्षण)**

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**Draft Indian Standard**  
**Information Technology — Database Language — SQL**  
**Part 1 Framework (SQL/Framework)**  
**(First Revision)**

**ICS 35.060**

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**Data Management System Sectional  
Committee, LITD 15**

**Last Date for Comments: 11 April 2025**

**NATIONAL FOREWORD**

(Formal clauses will be added later)

This draft Indian Standard (Part 1) (First Revision) which is identical to 'ISO/IEC 9075-1: 2023 Information technology - Database languages - SQL - Part 1: Framework (SQL/Framework)' issued by the International Organization Standardization (ISO) and International Electrotechnical Commission (IEC) will be adopted by the Bureau of Indian Standards (BIS) on the

recommendations of the Data Management System Sectional Committee and approval of the Electronics and Information Technology Division Council.

This Standard was originally published in 2019 and was identical with ISO/IEC 9075-1: 2016. The first revision of this standard has been undertaken to align it with the latest version of IEC 9075-1: 2023.

The main changes are as follows:

- addition and refinement of the terms and concepts to support new data types required by incremental parts;
- clarification and correction of the merge instructions for Technical Corrigenda and incremental parts;
- improve the presentation and accuracy of the summaries of implementation-defined and implementation-dependent aspects of this document;
- introduction of several digital artifacts;
- alignment with updated ISO house style and other guidelines for creating standards.

This sixth edition of ISO/IEC 9075-1 is designed to be used in conjunction with the following editions of other parts of the ISO/IEC 9075 series, all published 2023:

- ISO/IEC 9075-2, sixth edition;
- ISO/IEC 9075-3, sixth edition;
- ISO/IEC 9075-4, seventh edition;
- ISO/IEC 9075-9, fifth edition;
- ISO/IEC 9075-10, fifth edition;
- ISO/IEC 9075-11, fifth edition;
- ISO/IEC 9075-13, fifth edition;
- ISO/IEC 9075-14, sixth edition;
- ISO/IEC 9075-15, second edition;

— ISO/IEC 9075-16, first edition.

The text of ISO/IEC Standard may be approved as suitable for publication as an Indian Standard without deviations. Certain conventions and terminologies are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’, and
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

<b>International Standard</b>	<b>Corresponding Indian Standard</b>	<b>Degree of Equivalence</b>
ISO/IEC 9075-13: 2016 Information technology — Database languages — SQL — Part 13: SQL Routines and Types Using the Java™ Programming Language (SQL/JRT)	IS/ISO/IEC 9075-13: 2016 Information Technology Database Languages SQL Part 13 SQL Routines and Types Using the Java™ Programming Language ( SQL / JRT )	Identical with ISO/IEC 9075-13: 2016
ISO/IEC 9075-14: 2016 Information technology — Database languages — SQL — Part 14: XML-Related Specifications (SQL/XML)	IS/ISO/IEC 9075-14: 2016 Information Technology Database Languages SQL Part 14 XML Related Specifications ( SQL / XML )	Identical with ISO/IEC 9075-14 : 2016

The technical committee has reviewed the provisions of the following International Standard referred in this adopted draft standard and has decided that it is acceptable for use in conjunction

with this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:-

<b>International Standard</b>	<b>Title</b>
ISO/IEC 646	Information technology — ISO 7-bit coded character set for information interchange
ISO/IEC 9075-2	Information technology — Database languages — SQL — Part 2: Foundation (SQL/Foundation)
ISO/IEC 9075-3	Information technology — Database languages — SQL — Part 3: Call-Level Interface (SQL/CLI)
ISO/IEC 9075-4	Information technology — Database languages — SQL — Part 4: Persistent Stored Modules (SQL/PSM)
ISO/IEC 9075-9	Information technology — Database languages — SQL — Part 9: Management of External Data (SQL/MED)
ISO/IEC 9075-10	Information technology — Database languages — SQL — Part 10: Object Language Bindings (SQL/OLB)
ISO/IEC 9075-11	Information technology — Database languages — SQL — Part 11: Information and Definition Schemas
ISO/IEC 9075-13	Information technology — Database languages — SQL — Part 13: SQL Routines and Types Using the Java™ Programming Language (SQL/JRT)
ISO/IEC 9075-14	Information technology — Database languages — SQL — Part 14: XML-Related Specifications (SQL/XML)
ISO/IEC 9075-15	Information technology — Database languages — SQL — Part 15: Multidimensional Arrays (SQL/MDA)
ISO/IEC 9075-16	Information technology — Database languages — SQL — Part 16: Property Graph Queries (SQL/PGQ)
ISO/IEC 10646:2020	Information technology — Universal Multi-Octet Coded Character Set (UCS)
ISO/IEC 14651	Information technology — International string ordering and comparison — Method for comparing character strings and description of the common template tailorable ordering

**Scope of ISO/IEC 9075-1: 2023 is as follows:**

“This document describes the conceptual framework used in other parts of the ISO/IEC 9075 series to specify the grammar of SQL and the result of processing statements in that language by an SQL-implementation.

This document also defines terms and notation used in the other parts of the ISO/IEC 9075 series.”

Note: - The Technical content of this document has not been enclosed as these are identical with the corresponding ISO/IEC Standard. For details please refer to ISO/IEC 9075-1:2023 or kindly contact

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