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

**Part 1:  
XQuery regular expressions**

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

*Partie 1: Expressions régulières de XQuery en SQL*





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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives) or [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs)).

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This first edition of ISO/IEC 19075-1 cancels and replaces ISO/IEC TR 19075-1:2011.

This document is intended to be used in conjunction with the following editions of the parts of the ISO/IEC 9075 series:

- ISO/IEC 9075-1, sixth edition or later;
- ISO/IEC 9075-2, sixth edition or later;
- ISO/IEC 9075-3, sixth edition or later;
- ISO/IEC 9075-4, seventh edition or later;
- ISO/IEC 9075-9, fifth edition or later;
- ISO/IEC 9075-10, fifth edition or later;
- ISO/IEC 9075-11, fifth edition or later;
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## **ISO/IEC 19075-1:2021(E)**

- ISO/IEC 9075-14, sixth edition or later;
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A list of all parts in the ISO/IEC 19075 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html) and [www.iec.ch/national-committees](http://www.iec.ch/national-committees).

## 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, “XQuery regular expressions”**, explains how XQuery regular expressions are formed.
- 5) **Clause 5, “Operators using regular expressions”**, explains how the SQL operators use regular expressions.

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

Part 1:

## XQuery regular expressions

### 1 Scope

This document describes the regular expression support in SQL (ISO/IEC 9075-2) adopted from the regular expression syntax of [XQuery and XPath Functions and Operators 3.1](#), which is derived from Perl. This document discusses five operators using this regular expression syntax:

- LIKE\_REGEX predicate, to determine the existence of a match to a regular expression.
- OCCURRENCES\_REGEX numeric function, to determine the number of matches to a regular expression.
- POSITION\_REGEX function, to determine the position of a match.
- SUBSTRING\_REGEX function, to extract a substring matching a regular expression.
- TRANSLATE\_REGEX function, to perform replacements using a regular expression.



## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 9075-1, *Information technology — Database languages — SQL — Part 1: Framework (SQL/Framework)*

ISO/IEC 9075-2, *Information technology — Database languages — SQL — Part 2: Foundation (SQL/Foundation)*

ISO/IEC 9075-14, *Information technology — Database languages — SQL — Part 14: XML-Related Specifications (SQL/XML)*

Bray, Tim et al.. *Extensible Markup Language (XML) Version 1.0, W3C Recommendation* [online]. Fifth Edition. Cambridge, Massachusetts, USA: W3C, 26 November 2008 . Available at <http://www.w3.org/TR/xml>

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