

# Differences in Reporting with SQL

Version 1.0 (10.05.2009) by Ulrich Hambuch  
based on: <http://troels.arvin.dk/db/rdbms/>



Features	DB2 9.1	TQL (MSSQL 2005)	Oracle 10g	Remarks
<b>Views</b>	cannot be derived from more than one base table	at least Standard	at least Standard	
<b>Joins</b>	Natural Joins Using Full Joins Cross Join	at least Standard  y y	y y y	May be emulated with union of left and right join
<b>Select</b>	Order NULLs Limit Top-n Limit with Offset	NULLs higher non-NULL FETCH FIRST RANK() OVER ROW_NUMBER() OVER	NULLs lower non-NULL ROW_NUMBER() / TOP n RANK() OVER / TOP n WITH TOP n	NULLs higher non-NULL optional: NULLS LAST ROW_NUMBER RANK() OVER ROW_NUMBER()
<b>Insert</b>	Several Rows at a time	y		
<b>Data Types</b>	Boolean CHAR TIMESTAMP	not supported; CHAR(1) Standard No TIMESTAMP WITH TIME ZONE	not supported; BIT-Type Truncated White-Spaced when using functions No TIMESTAMP, Use DATETIME	not supported; NUMBER(1) Doesn't remove trailing spaced when exceeding CHAR length TIMESTAMP WITH TIME ZONE
<b>Functions</b>	CHARACTER_LENGTH SUBSTRING REPLACE TRIM LOCALTIMESTAMP Concatenation	Use LENGTH(TRIM()) SUBSTRING with USING unit Standard TRIM CURRENT_TIMESTAMP no Datatype casting	LEN(), DATALEN() SUBSTRING with different syntax Standard LTRIM, RTRIM CURRENT_TIMESTAMP + instead of	LENGTH(TRIM()) SUBSTR and SUBSTR-variants Standard TRIM LOCALTIMESTAMP automatic casting
<b>Command Line Tools</b>	db2	sqlcmd	sqlplus	
<b>Querying Metadata</b>	List Databases List Schemas List Tables Table Description	LIST DATABASE DIRECTORY SELECT schemaname from syscat.schemata LIST TABLES (FOR SCHEMA schemaname) DESCRIBE TABLE	EXEC SP_HELPDB SELECT SCHEMA_NAME FROM INFORMATION_SCHEMA.SCHEMATA Standard or SP_TABLES SP_HELP tablename	database=instance, check OS services Schema=User, SELECT username FROM all_users SELECT * from tab DESCRIBE tablename
<b>Performance Tuning</b>	Manually collect statistics Explain Execution Plan Query Time	RUNSTATS db2expln -database databasename -stmfile query.sql -terminal use db2batch	CREATE STATISTICS SET SHOWPLAN_TEXT ON SET STATISTICS TIME ON	ANALYZE TABLE EXPLAIN PLAN SET TIMING ON
<b>Other</b>	Dummy table Standard TCP/IP Port	SYSIBM.SYSDUMMY1, VALUES keyword 50000	No need for dummy-table 1433	Dummy-table: DUAL 1521