

## Data Types in DBMS

Data Types	Valid Examples	Invalid Examples
<b>CHARACTER</b> [(length)] Or <b>CHAR</b> [(length)]	'Race car' 'RACECAR' '24865' '1998-10-25' '1998-10-25 ' (Blank characters are truncated)	24865 1998-10-25 'Date: 1998-10-25'
<b>VARCHAR</b> (length)	'Race car' 'RACECAR' '24865' '1998-10-25' '1998-10-25 '	24865 1998-10-25 'Date: 1998-10-25'
<b>BOOLEAN</b>	TRUE true True False	1 0 Yes No
<b>SMALLINT</b>	-32768 0 -30.3 (digits to the right of the decimal point are truncated) 32767	-33,000,567 -32769 32768 1,897,536,000
<b>INTEGER</b> Or <b>INT</b>	-2147483648 -1025 0 1025.98 (digits to the right of the decimal point are truncated) 2147483647	-1,025,234,000,367 -2147483649 2147483648 1,025,234,000,367
<b>DECIMAL</b> [(p[,s])] or <b>DEC</b> [(p[,s])]	1234567 1234567.123 1234567.1234 (Final digit is truncated) -1234567 -1234567.123 -1234567.1234 (Final digit is truncated)	12345678 12345678.12 12345678.123 -12345678 -12345678.12 -12345678.123
<b>NUMERIC</b> [(p[,s])]	Same as DECIMAL	Same as DECIMAL

<b>REAL</b>	-2345 0 1E-3 1.245 123456789012345678901234567890	123,456,789,012,345,678,901,234,567,890,123
<b>FLOAT(p)</b>	12345678 1.2 123.45678 -12345678 -1.2 -123.45678	123456789 123.456789 -123456789 -123.456789
<b>DOUBLE PRECISION</b>	1234567890123456789012345678901234567890123456789012345678901234567890 345678901234567890 - 1234567890123456789012345678901234567890123456789012345678901234567890 345678901234567890 7890	123,456,789,012,345,678,901,234,567,890,123,123,456,789, 012,345,678,901,234,567,890 - 123,456,789,012,345,678,901,234,567,890,123,123,456,789, 012,345,678,901,234,567,890
<b>DATE</b>	DATE '1999-01-01' DATE '2000-2-2' date '0-1-1'	DATE '1999-13-1' date '2000-2-30' '2000-2-27' date 2000-2-27
<b>TIME</b>	TIME '00:00:00' TIME '1:00:00' TIME '23:59:59' time '23:59:59.99'	TIME '00:62:00' TIME '00:3:00' TIME '23:01' '24:01:00'
<b>TIMESTAMP</b>	TIMESTAMP `1999-12-31 23:59:59.99` TIMESTAMP `0-01-01 00:00:00`	1999-00-00 00:00:00 TIMESTAMP `1999-01-01 00:64:00`