- PAD_CHAR_TO_FULL_LENGTH

  By default, trailing spaces are trimmed from CHAR column values on retrieval. If
  PAD_CHAR_TO_FULL_LENGTH is enabled, trimming does not occur and retrieved CHAR values are
  padded to their full length. This mode does not apply to VARCHAR columns, for which trailing spaces are
  retained on retrieval.

  > **Note**
  >
  > As of MySQL 8.0.13, PAD_CHAR_TO_FULL_LENGTH is deprecated. Expect it to
  > be removed in a future version of MySQL.

```
mysql> CREATE TABLE t1 (c1 CHAR(10));
Query OK, 0 rows affected (0.37 sec)

mysql> INSERT INTO t1 (c1) VALUES('xy');
Query OK, 1 row affected (0.01 sec)

mysql> SET sql_mode = '';
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT c1, CHAR_LENGTH(c1) FROM t1;
+------+-----------------+
| c1   | CHAR_LENGTH(c1) |
+------+-----------------+
| xy   |               2 |
+------+-----------------+
1 row in set (0.00 sec)

mysql> SET sql_mode = 'PAD_CHAR_TO_FULL_LENGTH';
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT c1, CHAR_LENGTH(c1) FROM t1;
+------------+-----------------+
| c1         | CHAR_LENGTH(c1) |
+------------+-----------------+
| xy         |              10 |
+------------+-----------------+
1 row in set (0.00 sec)
```

- PIPES_AS_CONCAT

  Treat || as a string concatenation operator (same as CONCAT()) rather than as a synonym for OR.

- REAL_AS_FLOAT

  Treat REAL as a synonym for FLOAT. By default, MySQL treats REAL as a synonym for DOUBLE.

- STRICT_ALL_TABLES

  Enable strict SQL mode for all storage engines. Invalid data values are rejected. For details, see Strict
  SQL Mode.

- STRICT_TRANS_TABLES

  Enable strict SQL mode for transactional storage engines, and when possible for nontransactional
  storage engines. For details, see Strict SQL Mode.