newline, and so on). This syntax differs slightly from standard SQL comment syntax, as discussed in Section 1.7.2.4, "'--' as the Start of a Comment".

- From a `/*` sequence to the following `*/` sequence, as in the C programming language. This syntax enables a comment to extend over multiple lines because the beginning and closing sequences need not be on the same line.

The following example demonstrates all three comment styles:

```
mysql> SELECT 1+1;     # This comment continues to the end of line
mysql> SELECT 1+1;     -- This comment continues to the end of line
mysql> SELECT 1 /* this is an in-line comment */ + 1;
mysql> SELECT 1+
/*
this is a
multiple-line comment
*/
1;
```

Nested comments are not supported, and are deprecated; expect them to be removed in a future MySQL release. (Under some conditions, nested comments might be permitted, but usually are not, and users should avoid them.)

MySQL Server supports certain variants of C-style comments. These enable you to write code that includes MySQL extensions, but is still portable, by using comments of the following form:

```
/*! MySQL-specific code */
```

In this case, MySQL Server parses and executes the code within the comment as it would any other SQL statement, but other SQL servers should ignore the extensions. For example, MySQL Server recognizes the `STRAIGHT_JOIN` keyword in the following statement, but other servers should not:

```
SELECT /*! STRAIGHT_JOIN */ col1 FROM table1,table2 WHERE ...
```

If you add a version number after the `!` character, the syntax within the comment is executed only if the MySQL version is greater than or equal to the specified version number. The `KEY_BLOCK_SIZE` keyword in the following comment is executed only by servers from MySQL 5.1.10 or higher:

```
CREATE TABLE t1(a INT, KEY (a)) /*!50110 KEY_BLOCK_SIZE=1024 */;
```

The comment syntax just described applies to how the `mysqld` server parses SQL statements. The `mysql` client program also performs some parsing of statements before sending them to the server. (It does this to determine statement boundaries within a multiple-statement input line.) For information about differences between the server and `mysql` client parsers, see Section 4.5.1.6, "mysql Client Tips".

Comments in `/*!12345 ... */` format are not stored on the server. If this format is used to comment stored programs, the comments are not retained in the program body.

Another variant of C-style comment syntax is used to specify optimizer hints. Hint comments include a `+` character following the `/*` comment opening sequence. Example:

```
SELECT /*+ BKA(t1) */ FROM ... ;
```

For more information, see Section 8.9.3, "Optimizer Hints".

The use of short-form `mysql` commands such as `\C` within multiple-line `/* ... */` comments is not supported. Short-form commands do work within single-line `/*! ... */` version comments, as do `/*+ ... */` optimizer-hint comments, which are stored in object definitions. If there is a concern that optimizer-hint comments may be stored in object definitions so that dump files when reloaded with `mysql`