Temporal intervals are used for certain functions, such as `DATE_ADD()` and `DATE_SUB()`:

```
mysql> SELECT DATE_ADD('2018-05-01',INTERVAL 1 DAY);
        -> '2018-05-02'
mysql> SELECT DATE_SUB('2018-05-01',INTERVAL 1 YEAR);
        -> '2017-05-01'
mysql> SELECT DATE_ADD('2020-12-31 23:59:59',
    ->                 INTERVAL 1 SECOND);
        -> '2021-01-01 00:00:00'
mysql> SELECT DATE_ADD('2018-12-31 23:59:59',
    ->                 INTERVAL 1 DAY);
        -> '2019-01-01 23:59:59'
mysql> SELECT DATE_ADD('2100-12-31 23:59:59',
    ->                 INTERVAL '1:1' MINUTE_SECOND);
        -> '2101-01-01 00:01:00'
mysql> SELECT DATE_SUB('2025-01-01 00:00:00',
    ->                 INTERVAL '1 1:1:1' DAY_SECOND);
        -> '2024-12-30 22:58:59'
mysql> SELECT DATE_ADD('1900-01-01 00:00:00',
    ->                 INTERVAL '-1 10' DAY_HOUR);
        -> '1899-12-30 14:00:00'
mysql> SELECT DATE_SUB('1998-01-02', INTERVAL 31 DAY);
        -> '1997-12-02'
mysql> SELECT DATE_ADD('1992-12-31 23:59:59.000002',
    ->            INTERVAL '1.999999' SECOND_MICROSECOND);
        -> '1993-01-01 00:00:01.000001'
```

Temporal arithmetic also can be performed in expressions using `INTERVAL` together with the `+` or `-` operator:

```
date + INTERVAL expr unit
date - INTERVAL expr unit
```

`INTERVAL` *`expr unit`* is permitted on either side of the `+` operator if the expression on the other side is a date or datetime value. For the `-` operator, `INTERVAL` *`expr unit`* is permitted only on the right side, because it makes no sense to subtract a date or datetime value from an interval.

```
mysql> SELECT '2018-12-31 23:59:59' + INTERVAL 1 SECOND;
        -> '2019-01-01 00:00:00'
mysql> SELECT INTERVAL 1 DAY + '2018-12-31';
        -> '2019-01-01'
mysql> SELECT '2025-01-01' - INTERVAL 1 SECOND;
        -> '2024-12-31 23:59:59'
```

The `EXTRACT()` function uses the same kinds of *`unit`* specifiers as `DATE_ADD()` or `DATE_SUB()`, but extracts parts from the date rather than performing date arithmetic:

```
mysql> SELECT EXTRACT(YEAR FROM '2019-07-02');
        -> 2019
mysql> SELECT EXTRACT(YEAR_MONTH FROM '2019-07-02 01:02:03');
        -> 201907
```

Temporal intervals can be used in `CREATE EVENT` statements:

```
CREATE EVENT myevent
    ON SCHEDULE AT CURRENT_TIMESTAMP + INTERVAL 1 HOUR
    DO
      UPDATE myschema.mytable SET mycol = mycol + 1;
```

If you specify an interval value that is too short (does not include all the interval parts that would be expected from the *`unit`* keyword), MySQL assumes that you have left out the leftmost parts of the interval value. For example, if you specify a *`unit`* of `DAY_SECOND`, the value of *`expr`* is expected to have days, hours, minutes, and seconds parts. If you specify a value like `'1:10'`, MySQL assumes that the days and hours parts are missing and the value represents minutes and seconds. In other words, `'1:10'`