re-adding an index can be expensive for a large table, whereas making it invisible and visible are fast, in-place operations.

If an index made invisible actually is needed or used by the optimizer, there are several ways to notice the effect of its absence on queries for the table:

- Errors occur for queries that include index hints that refer to the invisible index.
- Performance Schema data shows an increase in workload for affected queries.
- Queries have different `EXPLAIN` execution plans.
- Queries appear in the slow query log that did not appear there previously.

The `use_invisible_indexes` flag of the `optimizer_switch` system variable controls whether the optimizer uses invisible indexes for query execution plan construction. If the flag is `off` (the default), the optimizer ignores invisible indexes (the same behavior as prior to the introduction of this flag). If the flag is `on`, invisible indexes remain invisible but the optimizer takes them into account for execution plan construction.

Using the `SET_VAR` optimizer hint to update the value of `optimizer_switch` temporarily, you can enable invisible indexes for the duration of a single query only, like this:

```
mysql> EXPLAIN SELECT /*+ SET_VAR(optimizer_switch = 'use_invisible_indexes=on') */
    >     i, j FROM t1 WHERE j >= 50\G
*************************** 1. row ***************************
           id: 1
  select_type: SIMPLE
        table: t1
   partitions: NULL
         type: range
possible_keys: j_idx
          key: j_idx
      key_len: 5
          ref: NULL
         rows: 2
     filtered: 100.00
        Extra: Using index condition

mysql> EXPLAIN SELECT i, j FROM t1 WHERE j >= 50\G
*************************** 1. row ***************************
           id: 1
  select_type: SIMPLE
        table: t1
   partitions: NULL
         type: ALL
possible_keys: NULL
          key: NULL
      key_len: NULL
          ref: NULL
         rows: 5
     filtered: 33.33
        Extra: Using where
```

Index visibility does not affect index maintenance. For example, an index continues to be updated per changes to table rows, and a unique index prevents insertion of duplicates into a column, regardless of whether the index is visible or invisible.

A table with no explicit primary key may still have an effective implicit primary key if it has any `UNIQUE` indexes on `NOT NULL` columns. In this case, the first such index places the same constraint on table rows as an explicit primary key and that index cannot be made invisible. Consider the following table definition: