

```
mysql> SELECT * FROM jtable;
+-----+
| jcol |
+-----+
| {"a": 10, "b": "wxyz", "c": "[true, false]"} |
+-----+
1 row in set (0.00 sec)
```

Now we update the column value using `JSON_SET()` such that a partial update can be performed; in this case, we replace the value pointed to by the `c` key (the array `[true, false]`) with one that takes up less space (the integer `1`):

```
mysql> UPDATE jtable
-> SET jcol = JSON_SET(jcol, "$.a", 10, "$.b", "wxyz", "$.c", 1);
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT * FROM jtable;
+-----+
| jcol |
+-----+
| {"a": 10, "b": "wxyz", "c": 1} |
+-----+
1 row in set (0.00 sec)

mysql> SELECT JSON_STORAGE_FREE(jcol) FROM jtable;
+-----+
| JSON_STORAGE_FREE(jcol) |
+-----+
| 14 |
+-----+
1 row in set (0.00 sec)
```

The effects of successive partial updates on this free space are cumulative, as shown in this example using `JSON_SET()` to reduce the space taken up by the value having key `b` (and making no other changes):

```
mysql> UPDATE jtable
-> SET jcol = JSON_SET(jcol, "$.a", 10, "$.b", "wx", "$.c", 1);
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT JSON_STORAGE_FREE(jcol) FROM jtable;
+-----+
| JSON_STORAGE_FREE(jcol) |
+-----+
| 16 |
+-----+
1 row in set (0.00 sec)
```

Updating the column without using `JSON_SET()`, `JSON_REPLACE()`, or `JSON_REMOVE()` means that the optimizer cannot perform the update in place; in this case, `JSON_STORAGE_FREE()` returns 0, as shown here:

```
mysql> UPDATE jtable SET jcol = '{"a": 10, "b": 1}';
Query OK, 1 row affected (0.05 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT JSON_STORAGE_FREE(jcol) FROM jtable;
+-----+
| JSON_STORAGE_FREE(jcol) |
+-----+
| 0 |
+-----+
```