**Anton Slizh’s**

**U1M4.LW. Access and Join Methods Part 1**

*GitHub: https://github.com/drapejny/DataCamp2022/tree/master/u1/lab\_4*

**Task 1**

Step 1:

Creating table t2

CREATE TABLE t2 AS

SELECT TRUNC(rownum / 100) id, RPAD(rownum, 100) t\_pad

FROM dual

CONNECT BY rownum < 100000;

Step 2:

Creating index on t2(id)

CREATE INDEX t2\_idx1 ON t2 (id);

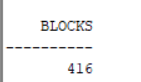
Step 3:

Selecting block count

SELECT blocks

FROM user\_segments

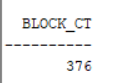
WHERE segment\_name = 'T2';



Selecting used blocks count

SELECT COUNT(DISTINCT (dbms\_rowid.rowid\_block\_number(rowid))) block\_ct

FROM t2;



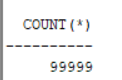
Enable autotrace

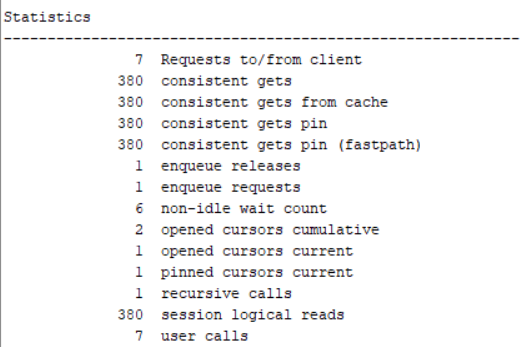
SET AUTOTRACE ON;

Selecting all rows count and show statistics

SELECT COUNT(\*)

FROM t2;





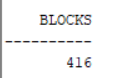
Step 4:

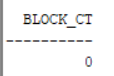
Deleting all rows from t2

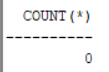
DELETE FROM t2;

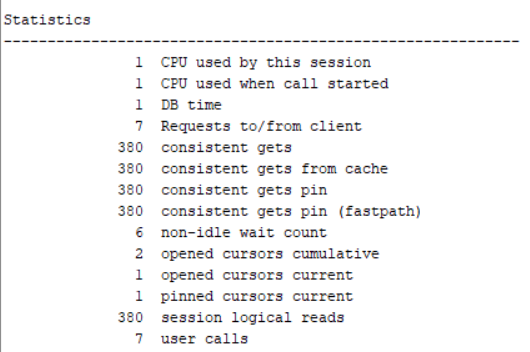
Step 5:

Repeating step 3









Step 6:

Inserting one row into t2 table

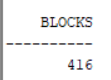
INSERT INTO t2 (ID, T\_PAD)

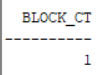
VALUES (1, '1');

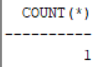
COMMIT;

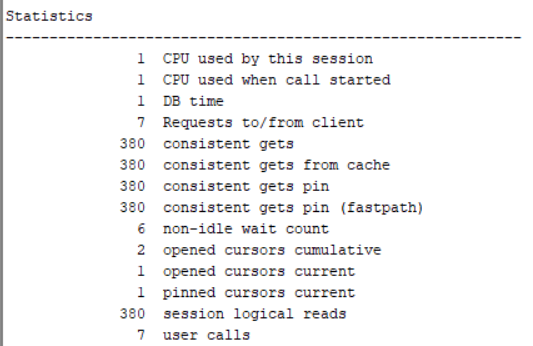
Step 7:

Repeating step 3









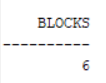
Step 8:

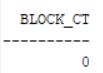
Truncating t2 table

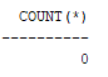
TRUNCATE TABLE t2;

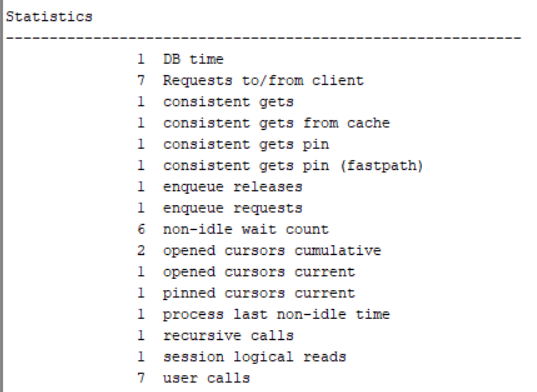
Step 9:

Repeating step 3









Result table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| № | Count of Blocks | Count of Used Blocks | Count of Rows | Consistent gets | Description |
| 1 | 416 | 376 | 99999 | 380 | Selecting on filled table |
| 2 | 416 | 0 | 0 | 380 | Selecting on empty table after *DELETE* operation |
| 3 | 416 | 1 | 1 | 380 | Selecting on table with 1 row |
| 4 | 6 | 0 | 0 | 1 | Selecting on empty table after TRUNCATE operation |

Take a closer look at 4th line in the table. The number of blocks differ from other selections. The main reason is that we used *TRUNCATE* operator to delete all rows from the table. Oracle Database deallocate all space used by removed rows except that specified by the MINEXTENTS storage parameter. MINEXTENTS specify the min number of extents to allocate when the object is created. By default MINEXTENTS parameter equals to 1. As I understand, 6 is the number of blocks in the remaining extent. Obviously, also decreased the number of consistent gets metric.