```
SQL> set feedback on
SQL> set linesize 300
SQL> set pagesize 500
SQL>
SQL> /* (1)     First, the script finds the total number of data blocks occupied by the relational
tables ORDERS and LINEITEM. */
SQL>
SQL> ANALYZE TABLE ORDERS COMPUTE STATISTICS;

Table analyzed.

SQL> ANALYZE TABLE LINEITEM COMPUTE STATISTICS;

Table analyzed.

SQL>
SQL> SELECT SEGMENT_NAME, BYTES, BLOCKS
  2  FROM USER_SEGMENTS
  3  WHERE SEGMENT_NAME IN ('ORDERS', 'LINEITEM');

SEGMENT_NAME
BYTES     BLOCKS
------------------------------------------------------------------------------------------------------------
------------------------------ ---------- ----------
LINEITEM
297795584      36352
ORDERS
59768832       7296

2 rows selected.

SQL>
SQL>
SQL> /* (2)     Next the script creates a new tablespace to keep the relational tables ORDERS1992
and LINEITEM1992.
SQL>        The size of a new tablespaces must be carfully adjusted to the size of both relational
tables ORDERS1992
SQL>        and LINEITEM1992.
*/
SQL> connect system/oracle
Connected.
SQL>
SQL> CREATE TABLESPACE TBS1992
  2   EXTENT MANAGEMENT LOCAL UNIFORM SIZE 256K
  3   SEGMENT SPACE MANAGEMENT AUTO
  4   BLOCKSIZE 8K
  5   DATAFILE '/opt/oracle/oradata/DB/tbs128.dbf'
  6     SIZE 25M AUTOEXTEND OFF;

Tablespace created.

SQL>
SQL> ALTER USER tpchr QUOTA 300M ON TBS1992;

User altered.

SQL>
SQL> connect tpchr/oracle
Connected.
SQL>
SQL> /* (3)     Next, the script creates the new relational tables ORDERS1992 and LINEITEM1992 to
store information about
SQL>        orders submitted in 1992. Note, that the new relational tables must have the
appropriate consistency
SQL>        constraints enforced. The tables must be stored in the new tablespace created in the
previous step.
SQL>
SQL>    Note, that in step (2) and step (3) you must take under the consideration an objective to
```

```
minimize storage
SQL>        allocation for the new tables and a new tablespace.
*/
SQL>
SQL> CREATE TABLE ORDERS1992(
  2   O_ORDERKEY        NUMBER(12)      NOT NULL,
  3   O_CUSTKEY NUMBER(12)      NOT NULL,
  4   O_TOTALPRICE      NUMBER(12,2)    NOT NULL,
  5   O_ORDERDATE       DATE            NOT NULL,
  6     CONSTRAINT ORDERS1992_PKEY PRIMARY KEY (O_ORDERKEY),
  7     CONSTRAINT ORDERS1992_CHECK1 CHECK( O_TOTALPRICE >= 0) ) PCTFREE 0 TABLESPACE TBS1992;

Table created.

SQL>
SQL> CREATE TABLE LINEITEM1992(
  2   L_ORDERKEY        NUMBER(12)      NOT NULL,
  3   L_LINENUMBER      NUMBER(12)      NOT NULL,
  4   L_QUANTITY        NUMBER(12,2)    NOT NULL,
  5   L_EXTENDEDPRICE NUMBER(12,2)      NOT NULL,
  6   L_DISCOUNT        NUMBER(12,2)    NOT NULL,
  7   L_TAX             NUMBER(12,2)    NOT NULL,
  8   L_SHIPDATE        DATE            NOT NULL,
  9     CONSTRAINT LINEITEM1992_PKEY PRIMARY KEY (L_ORDERKEY, L_LINENUMBER),
 10     CONSTRAINT LINEITEM1992_FKEY1 FOREIGN kEY (L_ORDERKEY)
 11             REFERENCES ORDERS(O_ORDERKEY),
 12     CONSTRAINT LINEITEM1992_CHECK1 CHECK (L_QUANTITY >= 0),
 13     CONSTRAINT LINEITEM1992_CHECK2 CHECK (L_EXTENDEDPRICE >= 0),
 14     CONSTRAINT LINEITEM1992_CHECK3 CHECK (L_TAX >= 0),
 15     CONSTRAINT LINEITEM1992_CHECK4 CHECK (L_DISCOUNT BETWEEN 0.00 AND 1.00) ) PCTFREE 0
TABLESPACE TBS1992;

Table created.

SQL>
SQL> /* (4)     Next, copy information about the orders submitted in 1992 to the new relational
tables.                         */
SQL>
SQL> INSERT INTO ORDERS1992 (SELECT O_ORDERKEY,O_CUSTKEY,O_TOTALPRICE,O_ORDERDATE
  2                          FROM ORDERS
  3                          WHERE TO_CHAR(O_ORDERDATE ,'YYYY') = '1992');

68291 rows created.

SQL>
SQL> INSERT INTO LINEITEM1992 (SELECT
L_ORDERKEY,L_LINENUMBER,L_QUANTITY,L_EXTENDEDPRICE,L_DISCOUNT,L_TAX,L_SHIPDATE
  2                            FROM LINEITEM
  3                            WHERE L_ORDERKEY IN (SELECT O_ORDERKEY
  4                                                 FROM ORDERS1992) );

273313 rows created.

SQL>
SQL> /* (5)     Next, whenever it is possible the script should reduce storage allocation for a
tablespace used and
SQL>        the relational tables created earlier.
*/
SQL>
SQL> ALTER TABLE LINEITEM1992 DEALLOCATE UNUSED;

Table altered.

SQL> ALTER TABLE ORDERS1992 DEALLOCATE UNUSED;

Table altered.

SQL>
SQL> /* (6)     Finally, the script finds the total number of data blocks occupied by the
```

```
relational tables ORDERS1992 and
SQL>        LINEITEM1992.
*/
SQL>
SQL> ANALYZE TABLE ORDERS1992 COMPUTE STATISTICS;

Table analyzed.

SQL> ANALYZE TABLE LINEITEM1992 COMPUTE STATISTICS;

Table analyzed.

SQL>
SQL> SELECT SEGMENT_NAME, BYTES, BLOCKS
  2  FROM USER_SEGMENTS
  3  WHERE SEGMENT_NAME IN ('ORDERS1992', 'LINEITEM1992');

SEGMENT_NAME
BYTES     BLOCKS
------------------------------------------------------------------------------------------------------------
------------------------------ ---------- ----------
LINEITEM1992
10485760       1280
ORDERS1992
2359296        288

2 rows selected.

SQL>
SQL> spool off
```