TP DBA report

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siw G2

1. <u>Create a new tablespace with a size of 4GB</u>

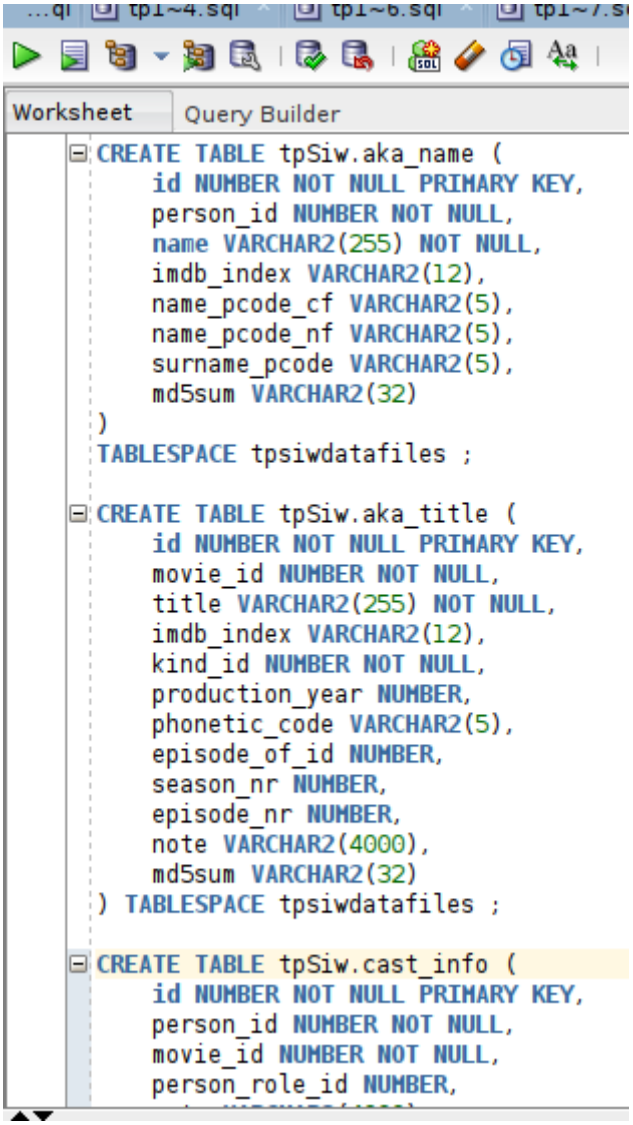
   sqlplus as / sysdba
   CREATE TABLESPACE tpsiwdatafiles DATAFILE '/opt/oracle/oradata/XE/XEPDB1/siw.dbf' size 4G

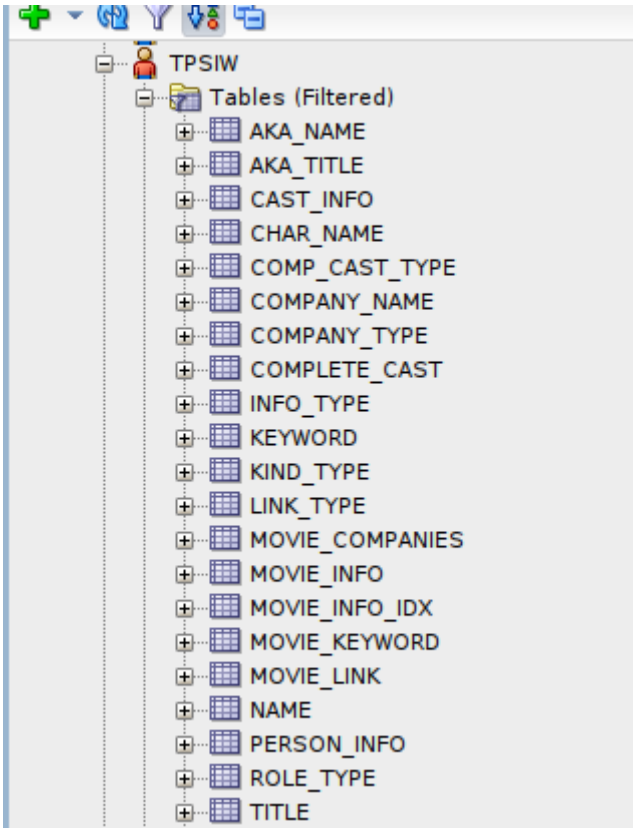
2. <u>create a new user and associate them with both the DBA and Advisor roles</u>

   CREATE USER tpSiw IDENTIFIED BY 123
   DEFAULT TABLESPACE tpsiwdatafiles
   TEMPORARY TABLESPACE temp;

   GRANT DBA TO tpSiw;
   GRANT ADVISOR TO tpSiw;
   commit;

3. <u>create the table using the script and import the csv file</u>



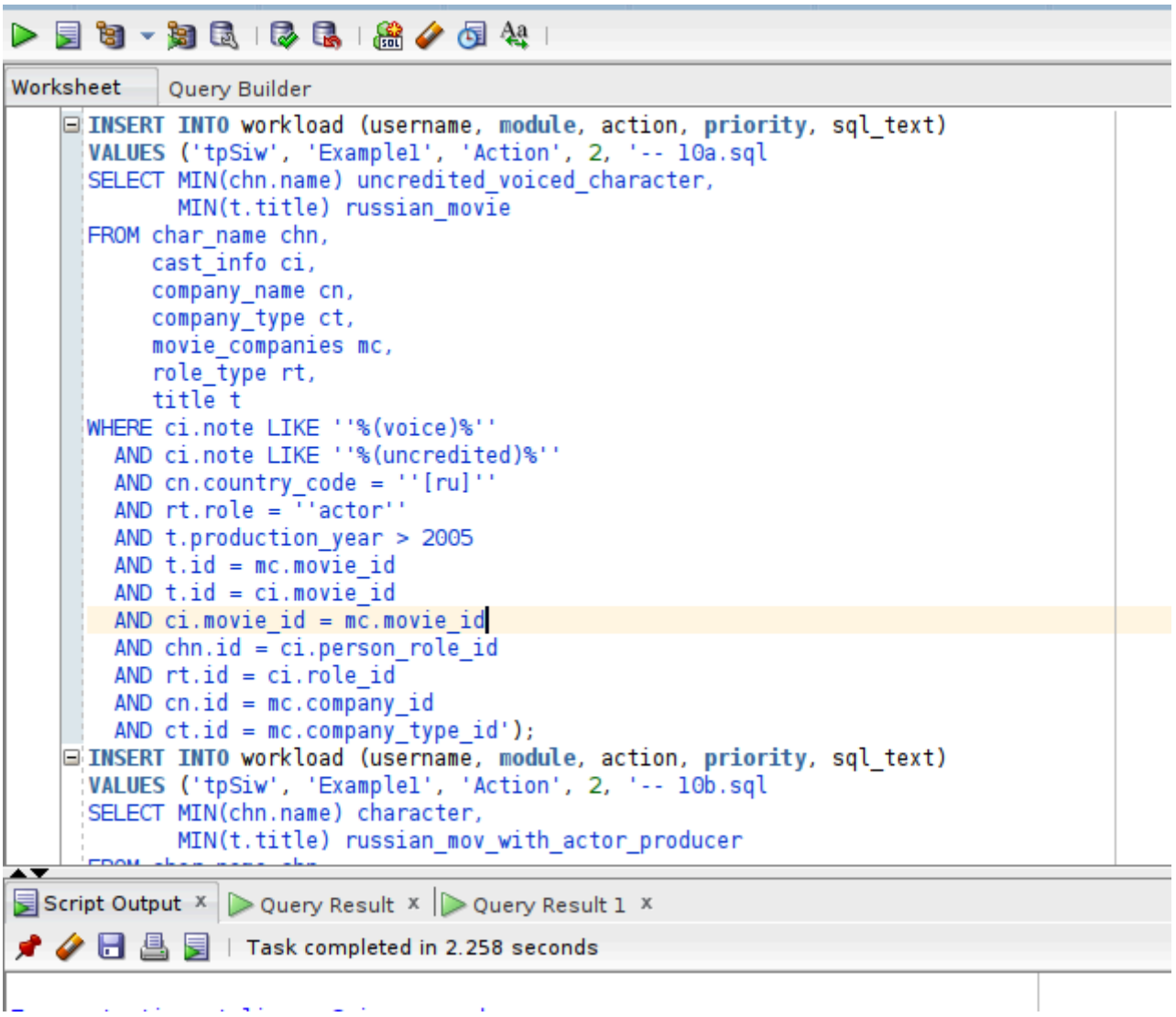


4. <u>create sql tuning set</u>

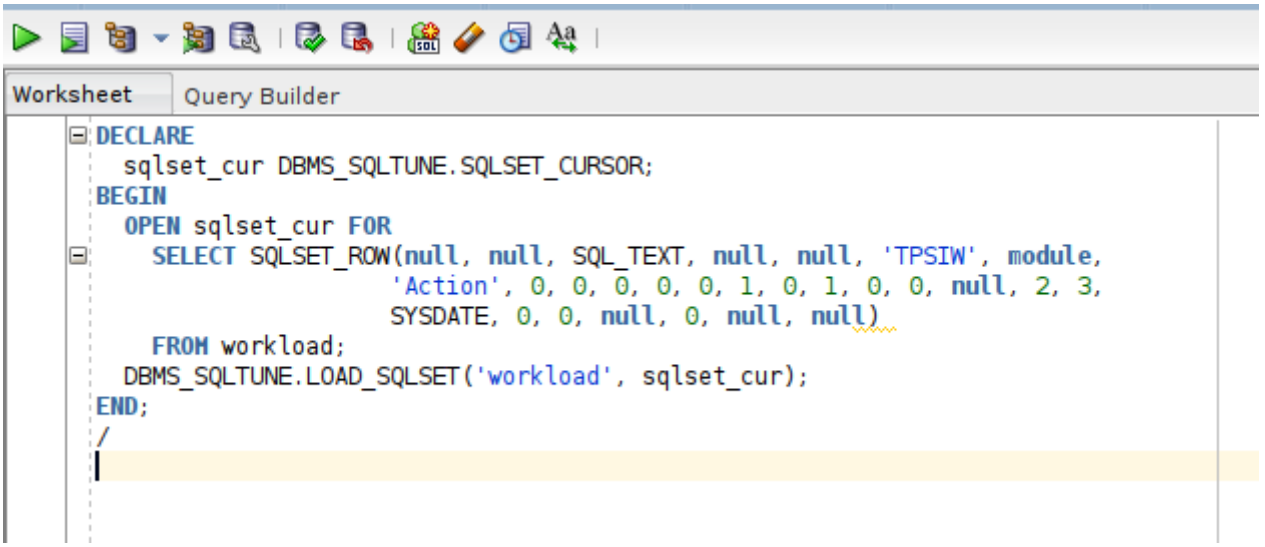
```
set the variables:
SET SERVEROUTPUT ON;
VARIABLE task_id NUMBER;
VARIABLE task_name VARCHAR2(255);
VARIABLE workload_name VARCHAR2(255);

EXECUTE :workload_name := 'workload';
EXECUTE DBMS_SQLTUNE.CREATE_SQLSET(:workload_name, 'description');

//crete the workload table
DROP TABLE user_workload;
CREATE TABLE workload
(
 username          varchar2(128),  /* User who executes statement */
 module            varchar2(64),   /* Application module name */
 action            varchar2(64),   /* Application action name */
 elapsed_time      number,         /* Elapsed time for query */
 cpu_time          number,         /* CPU time for query */
 buffer_gets       number,         /* Buffer gets consumed by query */
 disk_reads        number,         /* Disk reads consumed by query */
 rows_processed    number,         /* # of rows processed by query */
 executions        number,         /* # of times query executed */
 optimizer_cost    number,         /* Optimizer cost for query */
 priority          number,         /* User-priority (1,2 or 3) */
 last_execution_date  date,        /* Last time query executed */
 stat_period       number,         /* Window exec time in seconds */
 sql_text          clob            /* Full SQL Text */
```

);

5. Load the created workload with the set of queries in the script



6. Declares a cursor to hold the rows from the workload table



7. Creating and Configuring a SQL Access Advisor Task

```
EXEC :task_name := 'marwa';
EXEC DBMS_ADVISOR.CREATE_TASK('SQL Access Advisor', :task_id, :task_name);

----Set task parameters---
EXEC DBMS_ADVISOR.SET_TASK_PARAMETER(:task_name, 'TIME_LIMIT', 30);
EXEC DBMS_ADVISOR.SET_TASK_PARAMETER(:task_name, 'ANALYSIS_SCOPE', 'ALL');

-----Link the task to the workload.-----------
EXECUTE DBMS_ADVISOR.ADD_STS_REF('mytask', 'TPSIW', 'workload');
```

8. Executing a SQL Access Advisor Task

```
---------Execute the task.------------
EXECUTE DBMS_ADVISOR.EXECUTE_TASK(:task_name); or EXECUTE DBMS_ADVISOR.EXECUTE_TASK('marwa');

----you can check your task log-----------
SELECT TASK_ID, TASK_NAME, STATUS, STATUS_MESSAGE
FROM   USER_ADVISOR_LOG;
```

9. Viewing SQL Access Advisor Task Results:will contain recommendations generated by the SQL Access Advisor task

```
SQL>
SQL> VARIABLE task_name VARCHAR2(30);
SQL> EXEC :task_name := 'marwa';

PL/SQL procedure successfully completed.

SQL> SELECT REC_ID, RANK, BENEFIT
FROM   USER_ADVISOR_RECOMMENDATIONS
WHERE  TASK_NAME = :task_name
ORDER BY RANK;  2    3    4
```

the out put

REC_ID	RANK	BENEFIT
1	1	36146
2	2	122952
3	3	121996
4	4	107356
5	5	50428
6	6	123275
7	7	36036
8	8	39048
9	9	36047
10	10	29520
11	11	29674

REC_ID	RANK	BENEFIT
12	12	87414
13	13	98740
14	14	91935
15	15	87916
16	16	87671
17	17	87536
18	18	80544
19	19	80202
20	20	76447
21	21	76287
22	22	75904

```
    REC_ID       RANK    BENEFIT
---------- ---------- ----------
        23         23      18796
        24         24      17986
        25         25      58184
        26         26      68692
        27         27      58009
        28         28          2
        29         29          4
        30         30      20584
        31         31      23718
        32         32      19732
        33         33       7524

    REC_ID       RANK    BENEFIT
---------- ---------- ----------
        34         34      29116
        35         35      29092
        36         36      29092
        37         37          0
        38         38          1
        39         39      10290
        40         40       7500
        41         41       7142
        42         42       7229
        43         43       1229

43 rows selected.

SQL>
```