Practica dirigida base de datos

1. Comprobar las variables de entorno necesarias para conectarnos a la BD.

```
SQL> var OHM varchar2(100);
SQL> EXEC dbms_system.get_env('ORACLE_HOME', :OHM);

PL/SQL procedure successfully completed.

SQL> PRINT OHM

OHM
--------------------------------------------------------------------------------
C:\oraclexe\app\oracle\product\11.2.0\server
```

2. Identificar los procesos que componen instancia.

```
SQL> select username,program from v$process
  2  where background is not null;

USERNAME        PROGRAM
--------------- ------------------------------------------------
SYSTEM          ORACLE.EXE (PMON)
SYSTEM          ORACLE.EXE (PSP0)
SYSTEM          ORACLE.EXE (VKTM)
SYSTEM          ORACLE.EXE (GEN0)
SYSTEM          ORACLE.EXE (DIAG)
SYSTEM          ORACLE.EXE (DBRM)
SYSTEM          ORACLE.EXE (DIA0)
SYSTEM          ORACLE.EXE (MMAN)
SYSTEM          ORACLE.EXE (DBW0)
SYSTEM          ORACLE.EXE (LGWR)
SYSTEM          ORACLE.EXE (CKPT)

USERNAME        PROGRAM
--------------- ------------------------------------------------
SYSTEM          ORACLE.EXE (SMON)
SYSTEM          ORACLE.EXE (RECO)
SYSTEM          ORACLE.EXE (MMON)
SYSTEM          ORACLE.EXE (MMNL)
SYSTEM          ORACLE.EXE (W000)
SYSTEM          ORACLE.EXE (VKRM)
SYSTEM          ORACLE.EXE (QMNC)
SYSTEM          ORACLE.EXE (CJQ0)
SYSTEM          ORACLE.EXE (Q001)
SYSTEM          ORACLE.EXE (SMCO)
SYSTEM          ORACLE.EXE (Q002)

22 rows selected.
```

```
SQL> select name,description from v$process a, v$bgprocess b
  2  where a.ADDR=b.PADDR;

NAME  DESCRIPTION
----- ----------------------------------------------------------------
PMON  process cleanup
PSP0  process spawner 0
VKTM  Virtual Keeper of TiMe process
GEN0  generic0
DIAG  diagnosibility process
DBRM  DataBase Resource Manager
DIA0  diagnosibility process 0
MMAN  Memory Manager
DBW0  db writer process 0
LGWR  Redo etc.
CKPT  checkpoint

NAME  DESCRIPTION
----- ----------------------------------------------------------------
SMON  System Monitor Process
RECO  distributed recovery
MMON  Manageability Monitor Process
MMNL  Manageability Monitor Process 2
VKRM  Virtual sKeduler for Resource Manager
QMNC  AQ Coordinator
CJQ0  Job Queue Coordinator
SMCO  Space Manager Process

19 rows selected.
```

3. Ver el tamaño de la SGA de la BD y las cachés que la componen.

```
SQL> select * from v$sgainfo;

NAME                                  BYTES RES
-------------------------------- ---------- ---
Fixed SGA Size                      2260048 No
Redo Buffers                        5517312 No
Buffer Cache Size                 444596224 Yes
Shared Pool Size                  176160768 Yes
Large Pool Size                     4194304 Yes
Java Pool Size                      4194304 Yes
Streams Pool Size                         0 Yes
Shared IO Pool Size                       0 Yes
Granule Size                        4194304 No
Maximum SGA Size                 1068937216 No
Startup overhead in Shared Pool    75497472 No

NAME                                  BYTES RES
-------------------------------- ---------- ---
Free SGA Memory Available          432013312

12 rows selected.
```

```
SQL> select * from v$sgastat;

POOL         NAME                            BYTES
------------ -------------------------- ----------
             fixed_sga                      2260048
             buffer_cache                 444596224
             log_buffer                     5517312
shared pool  v_inc_meter_info_problem           664
shared pool  dpslut_kfdsg                       512
shared pool  hot latch diagnostics              160
shared pool  vips_package_file                 1320
shared pool  kkj jobq  wor                     4128
shared pool  ENQUEUE STATS                    21600
shared pool  transaction                     486728
shared pool  vem_user_actlog                    664

POOL         NAME                            BYTES
------------ -------------------------- ----------
shared pool  Wait History Array                   8
shared pool  vproblem_bucket                    848
shared pool  vnot_exist_incident               3200
shared pool  KCB buffer wait statistic         3352
shared pool  invalid low rba queue             2048
shared pool  KQF optimizer stats table         1864
shared pool  KWQDL SGA Ddtc gen cleanu           48
shared pool  KCB tablespace encryption          760
shared pool  ksunfy: system-global sta         5200
shared pool  DISPATCHERS INFO                  2496
shared pool  vips_file_metadata                 944

POOL         NAME                            BYTES
------------ -------------------------- ----------
shared pool  vips_file_copy_log                1696
shared pool  v_ipsprbcnt                        664
shared pool  vproblem_int                      2448
shared pool  SQLA                          25818536
shared pool  PLDIA                          2917488
shared pool  vtest_exists                      1040
shared pool  PRTDS                            33480
shared pool  kzekm heap descriptor              304
shared pool  kelt translation table             360
shared pool  VM OSD context                      96
shared pool  DDE_USER_ACTION_DEF               1320
```

...

```
POOL         NAME                           BYTES
------------ ------------------------- ----------
shared pool  time manager context               40
shared pool  kscdnfyinitflags                    8
shared pool  KTCTSNL freelists                  88
shared pool  KGI Session State                 944
shared pool  kxfpdp pointers                 28800
shared pool  KFG state obj                    7032
shared pool  kzsrs filename                    536
shared pool  INC_METER_IMPT_DEF               1040
shared pool  INC_METER_PK_IMPTS               1040
shared pool  vips_package_main_int             664
shared pool  dirty object counts array     2097152

POOL         NAME                           BYTES
------------ ------------------------- ----------
shared pool  distributed_transactions-       16168
shared pool  KGSK scheduler                  45504
shared pool  ksdhng: cbuf                    32768
shared pool  KTI latches                       576
shared pool  KKJ WRK LAT                       480
shared pool  HM_RECOMMENDATION                2072
shared pool  kfkhsh_kfdsg                     4104
shared pool  Wait History Segment           178880
shared pool  IPS_FILE_METADATA                 944
shared pool  IPS_PROGRESS_LOG                 1320
shared pool  INC_METER_CONFIG                 1224

POOL         NAME                           BYTES
------------ ------------------------- ----------
shared pool  event statistics ptr arra        1376
shared pool  KGKP randnum                    40000
large pool   PX msg pool                   3894304
large pool   free memory                    300000
java pool    free memory                   4194304

863 rows selected.
```

4. Comprobar valores de parámetros del init relacionados con el tamaño de la SGA.

```
SQL> show parameter db_block_size

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
db_block_size                        integer     8192
SQL> show parameter sga_target

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
sga_target                           big integer 0
SQL> show parameter sga_max_size

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
sga_max_size                         big integer 1G
SQL> show parameter log_buffer

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
log_buffer                           integer     5246976
SQL> show parameter shared_pool_size

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
shared_pool_size                     big integer 0
SQL> show parameter db_cache_size

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
db_cache_size                        big integer 0
SQL> show parameter large_pool_size

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
large_pool_size                      big integer 0
SQL> show parameter java_pool_size

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
java_pool_size                       big integer 0
SQL>
```

```
SQL> select * from v$sgainfo;

NAME                                  BYTES RES
------------------------------ ---------- ---
Fixed SGA Size                      2260048 No
Redo Buffers                        5517312 No
Buffer Cache Size                 444596224 Yes
Shared Pool Size                  176160768 Yes
Large Pool Size                     4194304 Yes
Java Pool Size                      4194304 Yes
Streams Pool Size                         0 Yes
Shared IO Pool Size                       0 Yes
Granule Size                        4194304 No
Maximum SGA Size                 1068937216 No
Startup overhead in Shared Pool    75497472 No

NAME                                  BYTES RES
------------------------------ ---------- ---
Free SGA Memory Available          432013312

12 rows selected.
```

```
SQL> select rpad(component,30),CURRENT_SIZE,USER_SPECIFIED_SIZE,min_size
  2  from V$SGA_DYNAMIC_COMPONENTS;

RPAD(COMPONENT,30)
--------------------------------------------------------------------------------
CURRENT_SIZE USER_SPECIFIED_SIZE   MIN_SIZE
------------ ------------------ ----------
shared pool
   176160768                  0  176160768

large pool
     4194304                  0    4194304

java pool
     4194304                  0    4194304


RPAD(COMPONENT,30)
--------------------------------------------------------------------------------
CURRENT_SIZE USER_SPECIFIED_SIZE   MIN_SIZE
------------ ------------------ ----------
streams pool
           0                  0          0

DEFAULT buffer cache
   444596224                  0  444596224

KEEP buffer cache
           0                  0          0
```

```
RPAD(COMPONENT,30)
------------------------------------------------------------------------------
CURRENT_SIZE USER_SPECIFIED_SIZE   MIN_SIZE
------------ ------------------- ----------
RECYCLE buffer cache
           0                   0          0

DEFAULT 2K buffer cache
           0                   0          0

DEFAULT 4K buffer cache
           0                   0          0


RPAD(COMPONENT,30)
------------------------------------------------------------------------------
CURRENT_SIZE USER_SPECIFIED_SIZE   MIN_SIZE
------------ ------------------- ----------
DEFAULT 8K buffer cache
           0                   0          0

DEFAULT 16K buffer cache
           0                   0          0

DEFAULT 32K buffer cache
           0                   0          0


RPAD(COMPONENT,30)
------------------------------------------------------------------------------
CURRENT_SIZE USER_SPECIFIED_SIZE   MIN_SIZE
------------ ------------------- ----------
Shared IO Pool
           0                   0          0

ASM Buffer Cache
           0                   0          0


14 rows selected.

Elapsed: 00:00:00.70
```

5. Comprobar ficheros que componen la BD y ubicarlos en la estructura OFA.

```
SQL> select * from v$datafile
  2  ;

     FILE# CREATION_CHANGE# CREATION        TS#     RFILE# STATUS  ENABLED
---------- ---------------- -------- ---------- ---------- ------- ----------
CHECKPOINT_CHANGE# CHECKPOI UNRECOVERABLE_CHANGE# UNRECOVE LAST_CHANGE# LAST_TIM
------------------ -------- -------------------- -------- ------------ --------
OFFLINE_CHANGE# ONLINE_CHANGE# ONLINE_T      BYTES     BLOCKS CREATE_BYTES
--------------- -------------- -------- ---------- ---------- ------------
BLOCK_SIZE
----------
NAME
--------------------------------------------------------------------------------
PLUGGED_IN BLOCK1_OFFSET
---------- -------------
AUX_NAME
--------------------------------------------------------------------------------
FIRST_NONLOGGED_SCN FIRST_NO FOREIGN_DBID FOREIGN_CREATION_CHANGE# FOREIGN_ PLU
------------------- -------- ------------ ------------------------ -------- ---
PLUGIN_CHANGE# PLUGIN_RESETLOGS_CHANGE# PLUGIN_R
-------------- ------------------------ --------
         1                8 29/05/14          0          1 SYSTEM  READ WRITE

     FILE# CREATION_CHANGE# CREATION        TS#     RFILE# STATUS  ENABLED
---------- ---------------- -------- ---------- ---------- ------- ----------
CHECKPOINT_CHANGE# CHECKPOI UNRECOVERABLE_CHANGE# UNRECOVE LAST_CHANGE# LAST_TIM
------------------ -------- -------------------- -------- ------------ --------
OFFLINE_CHANGE# ONLINE_CHANGE# ONLINE_T      BYTES     BLOCKS CREATE_BYTES
--------------- -------------- -------- ---------- ---------- ------------
BLOCK_SIZE
----------
NAME
--------------------------------------------------------------------------------
```

```
SQL> select * from v$tempfile;

     FILE# CREATION_CHANGE# CREATION        TS#     RFILE# STATUS  ENABLED
---------- ---------------- -------- ---------- ---------- ------- ----------
     BYTES     BLOCKS CREATE_BYTES BLOCK_SIZE
---------- ---------- ------------ ----------
NAME
--------------------------------------------------------------------------------
         1          371064 26/05/20          3          1 ONLINE  READ WRITE
  20971520       2560     20971520       8192
C:\ORACLEXE\APP\ORACLE\ORADATA\XE\TEMP.DBF
```

```
SQL> select * from v$logfile;

    GROUP# STATUS  TYPE
---------- ------- -------
MEMBER
--------------------------------------------------------------------------------
IS_
---
         2         ONLINE
C:\ORACLEXE\APP\ORACLE\FAST_RECOVERY_AREA\XE\ONLINELOG\O1_MF_2_HDSF7O1V_.LOG
YES

         1         ONLINE
C:\ORACLEXE\APP\ORACLE\FAST_RECOVERY_AREA\XE\ONLINELOG\O1_MF_1_HDSF7NRN_.LOG
YES

    GROUP# STATUS  TYPE
---------- ------- -------
MEMBER
--------------------------------------------------------------------------------
IS_
---
```

```
SQL> select * from v$logfile;

    GROUP# STATUS  TYPE
---------- ------- -------
MEMBER
--------------------------------------------------------------------------------
IS_
---
         2         ONLINE
C:\ORACLEXE\APP\ORACLE\FAST_RECOVERY_AREA\XE\ONLINELOG\O1_MF_2_HDSF7O1V_.LOG
YES

         1         ONLINE
C:\ORACLEXE\APP\ORACLE\FAST_RECOVERY_AREA\XE\ONLINELOG\O1_MF_1_HDSF7NRN_.LOG
YES

    GROUP# STATUS  TYPE
---------- ------- -------
MEMBER
--------------------------------------------------------------------------------
IS_
---


SQL> select * from v$controlfile;

STATUS
-------
NAME
--------------------------------------------------------------------------------
IS_ BLOCK_SIZE FILE_SIZE_BLKS
--- ---------- --------------

C:\ORACLEXE\APP\ORACLE\ORADATA\XE\CONTROL.DBF
NO       16384            594
```

6. Identificar la estructura lógica de la BD: tablespaces, segmentos, extensiones.

```
SQL> select tablespace_name from dba_tablespaces
  2  order by tablespace_name;

TABLESPACE_NAME
------------------------------
SYSAUX
SYSTEM
TEMP
UNDOTBS1
USERS
```

```
SQL> select tablespace_name,file_name from dba_data_files
  2  order by tablespace_name, file_name;

TABLESPACE_NAME
------------------------------
FILE_NAME
--------------------------------------------------------------------------------
SYSAUX
C:\ORACLEXE\APP\ORACLE\ORADATA\XE\SYSAUX.DBF

SYSTEM
C:\ORACLEXE\APP\ORACLE\ORADATA\XE\SYSTEM.DBF

UNDOTBS1
C:\ORACLEXE\APP\ORACLE\ORADATA\XE\UNDOTBS1.DBF


TABLESPACE_NAME
------------------------------
FILE_NAME
--------------------------------------------------------------------------------
USERS
C:\ORACLEXE\APP\ORACLE\ORADATA\XE\USERS.DBF
```

```
SQL> select tablespace_name,file_name from dba_temp_files
  2  order by tablespace_name, file_name;

TABLESPACE_NAME
------------------------------
FILE_NAME
--------------------------------------------------------------------------------
TEMP
C:\ORACLEXE\APP\ORACLE\ORADATA\XE\TEMP.DBF
```

```
SQL> select tablespace_name,segment_type,count(*) segmentos
  2  from dba_segments
  3  group by tablespace_name,segment_type;

TABLESPACE_NAME                SEGMENT_TYPE        SEGMENTOS
------------------------------ ------------------ ----------
SYSTEM                         CLUSTER                     9
SYSTEM                         TABLE                     583
SYSTEM                         INDEX                     744
SYSAUX                         NESTED TABLE               24
USERS                          TABLE                       7
SYSAUX                         INDEX                    1818
SYSAUX                         INDEX PARTITION           126
SYSAUX                         LOBSEGMENT                737
SYSAUX                         LOB PARTITION               1
SYSTEM                         LOBSEGMENT                104
SYSAUX                         TABLE PARTITION           109

TABLESPACE_NAME                SEGMENT_TYPE        SEGMENTOS
------------------------------ ------------------ ----------
SYSAUX                         LOBINDEX                  737
UNDOTBS1                       TYPE2 UNDO                 10
SYSAUX                         TABLE                     918
SYSTEM                         NESTED TABLE               10
SYSTEM                         ROLLBACK                    1
SYSAUX                         CLUSTER                     1
SYSTEM                         LOBINDEX                  104
USERS                          INDEX                      19
SYSAUX                         TABLE SUBPARTITION         32

20 rows selected.
```

7. Consultar información sobre la base de datos (v$database) y la instancia (v$instance).

```
Connected.
SQL> select name, created, log_mode, checkpoint_change#, open_mode, platform_name, current_scn from v$database;

NAME      CREATED  LOG_MODE     CHECKPOINT_CHANGE# OPEN_MODE
--------- -------- ------------ ------------------ --------------------
PLATFORM_NAME
--------------------------------------------------------------------------------
CURRENT_SCN
-----------
XE        26/05/20 NOARCHIVELOG            537975 READ WRITE
Microsoft Windows x86 64-bit
     549042
```

```
SQL> select  instance_name,host_name,version,startup_time, status,archiver,logins,database_status from v$instance;

INSTANCE_NAME
---------------
HOST_NAME
----------------------------------------------------------------
VERSION           STARTUP_ STATUS       ARCHIVE LOGINS     DATABASE_STATUS
----------------- -------- ------------ ------- ---------- -----------------
xe
DESKTOP-T6PEFHS
11.2.0.2.0        31/05/20 OPEN         STOPPED ALLOWED    ACTIVE
```

8. . Localizar el proceso “servidor” asociado a mi sesión (v$process y v$session). ¿Es un servidor dedicado o compartido?

```
SQL>  connect SYSTEM
Enter password:
Connected.
SQL>
```

```
SQL> select a.SERVER, a.username dbuser,a.OSUSER, a.PROCESS user_process,
  2  a.machine, a.terminal, a.program user_program,
  3  b.spid server_process, b.program  server_program
  4  from v$session a, v$process b
  5  where a.username=USER and a.PADDR=b.ADDR;

SERVER    DBUSER                         OSUSER
--------- ------------------------------ ------------------------------
USER_PROCESS
------------------------
MACHINE
----------------------------------------------------------------
TERMINAL
---------------
USER_PROGRAM
----------------------------------------------------------------
SERVER_PROCESS
------------------------
SERVER_PROGRAM
----------------------------------------------------------------
DEDICATED SYSTEM                         DESKTOP-T6PEFHS\Hp

SERVER    DBUSER                         OSUSER
--------- ------------------------------ ------------------------------
USER_PROCESS
------------------------
MACHINE
----------------------------------------------------------------
TERMINAL
---------------
USER_PROGRAM
----------------------------------------------------------------
SERVER_PROCESS
------------------------
SERVER_PROGRAM
----------------------------------------------------------------
5640:1636
```

```
SERVER    DBUSER                          OSUSER
--------- ------------------------------- ------------------------------
USER_PROCESS
------------------------
MACHINE
----------------------------------------------------------------
TERMINAL
----------------
USER_PROGRAM
----------------------------------------------------------------
SERVER_PROCESS
------------------------
SERVER_PROGRAM
----------------------------------------------------------------
WORKGROUP\DESKTOP-T6PEFHS

SERVER    DBUSER                          OSUSER
--------- ------------------------------- ------------------------------
USER_PROCESS
------------------------
MACHINE
----------------------------------------------------------------
TERMINAL
----------------
USER_PROGRAM
----------------------------------------------------------------
SERVER_PROCESS
------------------------
SERVER_PROGRAM
----------------------------------------------------------------
DESKTOP-T6PEFHS

SERVER    DBUSER                          OSUSER
--------- ------------------------------- ------------------------------
USER_PROCESS
------------------------
MACHINE
----------------------------------------------------------------
TERMINAL
```

```
----------------
USER_PROGRAM
------------------------------------------------------------------
SERVER_PROCESS
------------------------
SERVER_PROGRAM
------------------------------------------------------------------
sqlplus.exe

SERVER    DBUSER                          OSUSER
--------- ------------------------------ ------------------------------
USER_PROCESS
------------------------
MACHINE
------------------------------------------------------------------
TERMINAL
----------------
USER_PROGRAM
------------------------------------------------------------------
SERVER_PROCESS
------------------------
SERVER_PROGRAM
------------------------------------------------------------------
9928

SERVER    DBUSER                          OSUSER
--------- ------------------------------ ------------------------------
USER_PROCESS
------------------------
MACHINE
------------------------------------------------------------------
TERMINAL
----------------
USER_PROGRAM
------------------------------------------------------------------
SERVER_PROCESS
------------------------
SERVER_PROGRAM
------------------------------------------------------------------
ORACLE.EXE (SHAD)
```

```
SERVER    DBUSER                          OSUSER
--------- ------------------------------ ------------------------------
USER_PROCESS
------------------------
MACHINE
------------------------------------------------------------------
TERMINAL
----------------
USER_PROGRAM
------------------------------------------------------------------
SERVER_PROCESS
------------------------
SERVER_PROGRAM
------------------------------------------------------------------
```

9. ¿Cuánto ocupa la Dictionary cache y la Library cache en tu BD? (v$sgastat)

```
SQL> select * from v$sgastat where name like '%cache';

POOL         NAME                            BYTES
------------ -------------------------- ----------
             buffer_cache                419430400
shared pool  ksdhng: blkers cache             5504
shared pool  KTU avail cache                  4032
shared pool  ksdhng: blkrs cache              2752
shared pool  ksdhng: els blkrs cache        247680
shared pool  ksdhng: fblkrs cache             8256
shared pool  ksdhng: el wtr cache            30272
shared pool  ksvr msg cache                   2392
shared pool  ksdhng: wtr cache                2752
shared pool  row cache                     7589256
shared pool  kkae edition name cache           408

11 rows selected.
```

10. **Ver la actividad de la Library Cache (v$librarycache).**

```
SQL> select namespace,pinhitratio from v$librarycache;

NAMESPACE                                                       PINHITRATIO
--------------------------------------------------------------- -----------
SQL AREA                                                         ,964923114
TABLE/PROCEDURE                                                  ,840293809
BODY                                                             ,958249158
TRIGGER                                                          ,583333333
INDEX                                                            ,680555556
CLUSTER                                                          ,981519507
QUEUE                                                            ,333333333
RULESET                                                          ,666666667
TEMPORARY TABLE                                                           0
TEMPORARY INDEX                                                           0
EDITION                                                          ,993031359

NAMESPACE                                                       PINHITRATIO
--------------------------------------------------------------- -----------
DBLINK                                                                    1
OBJECT ID                                                                 1
SCHEMA                                                                    1
DBINSTANCE                                                                1
SQL AREA STATS                                                   ,038990826
ACCOUNT_STATUS                                                            1
SQL AREA BUILD                                                            1

18 rows selected.
```

11. Ver las sentencias SQL que guarda la Shared-Pool (v$sqlarea).

```
SQL> SET PAUSE ON
SQL> SET PAGESIZE 37
SQL> select SQL_TEXT, PERSISTENT_MEM, EXECUTIONS, LOADS, DISK_READS, CPU_TIME, ELAPSED_TIME from v$sqlarea order by DISK_READS desc;


SQL_TEXT
--------------------------------------------------------------------------------
PERSISTENT_MEM EXECUTIONS      LOADS DISK_READS   CPU_TIME ELAPSED_TIME
-------------- ---------- ---------- ---------- ---------- ------------
call dbms_stats.gather_database_stats_job_proc (  )
          6056          2          1       3115   17125000     25385722

select o.name, o.owner# from obj$ o, type$ t  where o.oid$ = t.tvoid and  bitand
(t.properties,8388608) = 8388608 and (sysdate-o.ctime) > 0.0007
          7720          3          1       1622     171875       155119

SELECT space_usage_kbytes  FROM  v$sysaux_occupants  WHERE occupant_name = 'SQL_
MANAGEMENT_BASE'
          3128          1          1       1317    1578125      2000162

select owner, segment_name, blocks from dba_segments where tablespace_name = :ts
name
         84816          1          1       1209     187500       301157

select /*+ index(idl_ub1$ i_idl_ub11) +*/ piece#,length,piece from idl_ub1$ wher
e obj#=:1 and part=:2 and version=:3 order by piece#
         12096        174          3        956     156250       352540

/* SQL Analyze(1) */ select /*+  full(t)    no_parallel(t) no_parallel_index(t)
dbms_stats cursor_sharing_exact use_weak_name_resl dynamic_sampling(0) no_monito
ring no_substrb_pad  */to_char(count("SNAP_ID")),to_char(substrb(dump(min("SNAP_
ID"),16,0,32),1,120)),to_char(substrb(dump(max("SNAP_ID"),16,0,32),1,120)),to_ch
ar(count("DBID")),to_char(substrb(dump(min("DBID"),16,0,32),1,120)),to_char(subs
trb(dump(max("DBID"),16,0,32),1,120)),to_char(count("INSTANCE_NUMBER")),to_char(
substrb(dump(min("INSTANCE_NUMBER"),16,0,32),1,120)),to_char(substrb(dump(max("I
NSTANCE_NUMBER"),16,0,32),1,120)),to_char(count("BEGIN_TIME")),to_char(substrb(d
ump(min("BEGIN_TIME"),16,0,32),1,120)),to_char(substrb(dump(max("BEGIN_TIME"),16
,0,32),1,120)),to_char(count("END_TIME")),to_char(substrb(dump(min("END_TIME"),1
6,0,32),1,120)),to_char(substrb(dump(max("END_TIME"),16,0,32),1,120)),to_char(co
unt("INTSIZE")),to_char(substrb(dump(min("INTSIZE"),16,0,32),1,120)),to_char(sub
strb(dump(max("INTSIZE"),16,0,32),1,120)
```

12. Crear el fichero de autenticación y activarlo (orapwd).

```
SQL> SHUTDOWN IMMEDIATE
Database closed.
Database dismounted.
ORACLE instance shut down.
SQL> STARTUP
ORACLE instance started.

Total System Global Area  535662592 bytes
Fixed Size                  1384760 bytes
Variable Size             335548104 bytes
Database Buffers          192937984 bytes
Redo Buffers                5791744 bytes
Database mounted.
Database opened.
SQL> exit
Disconnected from Oracle Database 11g Express Edition Release 11.2.0.2.0 - Production
```

13. Asignar la variable NLS_LANG para nuestro país y comprobar el cambio en las respuestas de Oracle desde sqlplus.

```
SQL> SELECT * FROM NLS_SESSION_PARAMETERS;

PARAMETER
--------------------------------------------------------------------------------
VALUE
--------------------------------------------------------------------------------
NLS_LANGUAGE
SPANISH

NLS_TERRITORY
SPAIN

NLS_CURRENCY
Ç


PARAMETER
--------------------------------------------------------------------------------
VALUE
--------------------------------------------------------------------------------
NLS_ISO_CURRENCY
SPAIN

NLS_NUMERIC_CHARACTERS
,.

NLS_CALENDAR
GREGORIAN
```

```
PARAMETER
--------------------------------------------------------------------------------
VALUE
--------------------------------------------------------------------------------
NLS_TIMESTAMP_TZ_FORMAT
DD/MM/RR HH24:MI:SSXFF TZR

NLS_DUAL_CURRENCY
Ç

NLS_COMP
BINARY


PARAMETER
--------------------------------------------------------------------------------
VALUE
--------------------------------------------------------------------------------
NLS_LENGTH_SEMANTICS
BYTE

NLS_NCHAR_CONV_EXCP
FALSE


17 rows selected.
```

14. Subir el tamaño de la shared-pool un gránulo más (p.e. si tenía 48M subirlo a 52M, si el gránulo es de 4M) y comprobar cómo aumenta el espacio libre en dicha caché.

```
SQL> select * from v$sga_dynamic_components where component='shared pool';

COMPONENT                                                        CURRENT_SIZE
---------------------------------------------------------------- ------------
  MIN_SIZE   MAX_SIZE USER_SPECIFIED_SIZE OPER_COUNT LAST_OPER_TYP LAST_OPER
---------- ---------- ------------------ ---------- ------------ ---------
LAST_OPE GRANULE_SIZE
-------- ------------
shared pool                                                       201326592
 201326592  201326592                  0          0 STATIC
             4194304
```

15. Comprobar el funcionamiento de la caché de redolog, como protectora del contenido de la caché de datos. Para ello iniciaremos una transacción y provocaremos una caída de la BD, comprobando que al arrancarla de nuevo, se mantendrá la integridad de la misma.

```
SQL> create table SCOTT.borrame (c1 varchar2(10)) tablespace users;
create table SCOTT.borrame (c1 varchar2(10)) tablespace users
                    *
ERROR at line 1:
ORA-00955: name is already used by an existing object
```

16. Sdgsgsd

```
SQL> desc SCOTT.borrame
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 C1                                                 VARCHAR2(10)
```

```
SQL> insert into  SCOTT.borrame values ('Primera');

1 row created.

SQL> commit;

Commit complete.

SQL> select * from SCOTT.borrame;

C1
----------
Primera

SQL> insert into SCOTT.borrame values ('Segunda');

1 row created.

SQL>
SQL> select * from SCOTT.borrame;

C1
----------
Primera
Segunda
```

```
SQL> shutdown abort
ORACLE instance shut down.
SQL> connect / as sysdba
Connected to an idle instance.
SQL>
SQL> startup
ORACLE instance started.

Total System Global Area  535662592 bytes
Fixed Size                  1384760 bytes
Variable Size             335548104 bytes
Database Buffers          192937984 bytes
Redo Buffers                5791744 bytes
Database mounted.
Database opened.
```

```
SQL> select * from SCOTT.borrame;

C1
----------
Primera

SQL> insert into SCOTT.borrame values ('Segunda');

1 row created.

SQL> commit;

Commit complete.

SQL> select * from SCOTT.borrame;

C1
----------
Primera
Segunda

SQL> shutdown abort
ORACLE instance shut down.
SQL> connect / as sysdba
Connected to an idle instance.
SQL> startup
ORACLE instance started.

Total System Global Area  535662592 bytes
Fixed Size                  1384760 bytes
Variable Size             335548104 bytes
Database Buffers          192937984 bytes
Redo Buffers                5791744 bytes
Database mounted.
Database opened.
SQL> select * from SCOTT.borrame;

C1
----------
Primera
Segunda
```

```
SQL> set timing on
SQL> select count(*) from dba_source;

  COUNT(*)
----------
    228538

Elapsed: 00:00:00.45
SQL> r
  1* select count(*) from dba_source

  COUNT(*)
----------
    228538

Elapsed: 00:00:00.14
```