# **Lab Part 2 – Checklist Items 13-19**

## **Monitor Health of Database – Items 13-15**

SQL>

SQL> SET SERVEROUTPUT ON;

SQL>

SQL> /\*---------------------------------------------------\*/

SQL> /\* Part 2 Checklist Items 13-19 \*/

SQL> /\*---------------------------------------------------\*/

SQL>

SQL> SHOW USER;

USER is "DBAUSER"

SQL>

SQL> CONNECT DBAUser/abc123;

Connected.

SQL>

SQL> SHOW USER;

USER is "DBAUSER"

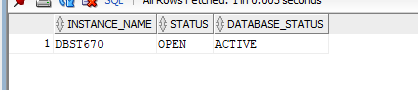
SQL>

SQL> /\*Item 13-15 - Monitor Database status\*/

SQL>

SQL> /\*Check if database status is open and active\*/

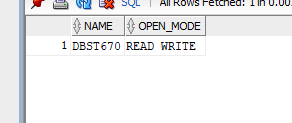
SQL> SELECT instance\_name, status, database\_status FROM V$INSTANCE;



SQL>

SQL> /\*Check if status allows you to read and write to database\*/

SQL> SELECT name, open\_mode FROM V$DATABASE;



SQL>

SQL>

SQL> /\*Get Database reserved, used, and free space size\*/

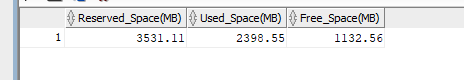
SQL> SELECT "Reserved\_Space(MB)", "Reserved\_Space(MB)" - "Free\_Space(MB)" "Used\_Space(MB)","Free\_Space(MB)"

2 FROM ( SELECT

3 (SELECT round(SUM(bytes/(1024\*1024)),2) FROM dba\_data\_files) "Reserved\_Space(MB)",

4 (SELECT round(SUM(bytes/(1024\*1024)),2) FROM dba\_free\_space) "Free\_Space(MB)"

5 FROM dual);



SQL>

SQL> /\*Show tablespace file location. Also, allocated and free space per tablespace\*/

SQL> SELECT

2 a.tablespace\_name,

3 a.file\_name,

4 round(a.bytes/(1024\*1024), 2) allocated\_MB,

5 round(b.free\_bytes/(1024\*1024),2) free\_MB

6 FROM

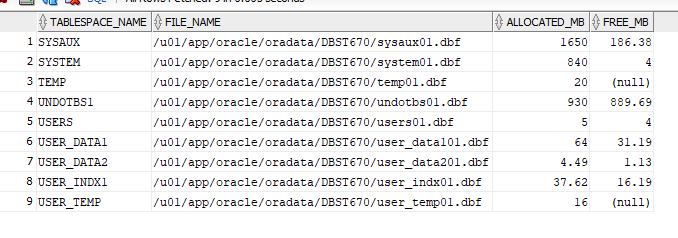
7 (SELECT tablespace\_name, file\_name, bytes

8 FROM dba\_data\_files UNION SELECT tablespace\_name, file\_name, bytes FROM dba\_temp\_files )a,

9 (SELECT tablespace\_name, SUM(bytes) free\_bytes

10 FROM dba\_free\_space b GROUP BY tablespace\_name) b

11 WHERE a.tablespace\_name=b.tablespace\_name(+) ORDER BY a.tablespace\_name;

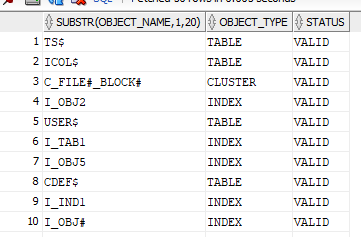


SQL>

SQL>

SQL> /\*Return all objects\*/

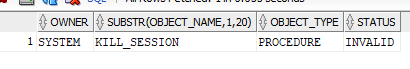
SQL> SELECT substr(object\_name,1,20), object\_type,status FROM all\_objects;



SQL>

SQL> /\*Return all invalid objects\*/

SQL> SELECT owner, substr(object\_name,1,20), object\_type, status FROM all\_objects WHERE status = 'INVALID';



## **Create Users – Item 16**

SQL>

SQL> /\*Item 16 - Create end users and give privileges\*/

SQL>

SQL> /\*Drop Users\*/

SQL>

SQL> DROP USER jkamando CASCADE;

User JKAMANDO dropped.

SQL>

SQL> DROP USER tokusanya CASCADE;

User TOKUSANYA dropped.

SQL>

SQL> DROP USER joluwadamilare CASCADE;

User JOLUWADAMILARE dropped.

SQL>

SQL> DROP USER brussell CASCADE;

User BRUSSELL dropped.

SQL>

SQL> DROP USER rseyoum CASCADE;

User RSEYOUM dropped.

SQL>

SQL> /\*---------------------------------------------------\*/

SQL> /\* CREATE USERS \*/

SQL> /\*---------------------------------------------------\*/

SQL>

SQL> CREATE USER jkamando IDENTIFIED BY abc123

2 DEFAULT TABLESPACE users

3 TEMPORARY TABLESPACE temp;

User JKAMANDO created.

SQL>

SQL> CREATE USER tokusanya IDENTIFIED BY abc123

2 DEFAULT TABLESPACE users

3 TEMPORARY TABLESPACE temp;

User TOKUSANYA created.

SQL>

SQL> CREATE USER joluwadamilare IDENTIFIED BY abc123

2 DEFAULT TABLESPACE users

3 TEMPORARY TABLESPACE temp;

User JOLUWADAMILARE created.

SQL>

SQL> CREATE USER brussell IDENTIFIED BY abc123

2 DEFAULT TABLESPACE users

3 TEMPORARY TABLESPACE temp;

User BRUSSELL created.

SQL>

SQL> CREATE USER rseyoum IDENTIFIED BY abc123

2 DEFAULT TABLESPACE users

3 TEMPORARY TABLESPACE temp;

User RSEYOUM created.

SQL>

SQL>

SQL> /\*Grant necessary permissions\*/

SQL>

SQL> GRANT connect,resource TO jkamando;

Grant succeeded.

SQL>

SQL> GRANT connect,resource TO tokusanya;

Grant succeeded.

SQL>

SQL> GRANT connect,resource TO joluwadamilare;

Grant succeeded.

SQL>

SQL> GRANT connect,resource TO brussell;

Grant succeeded.

SQL>

SQL> GRANT connect,resource TO rseyoum;

Grant succeeded.

SQL>

SQL>

SQL> /\*Alter unprivileged user tablespace\*/

SQL> ALTER USER JKamando DEFAULT TABLESPACE user\_data1 TEMPORARY TABLESPACE user\_temp;

User JKAMANDO altered.

SQL> ALTER USER TOkusanya DEFAULT TABLESPACE user\_data1 TEMPORARY TABLESPACE user\_temp;

User TOKUSANYA altered.

SQL> ALTER USER JOluwadamilare DEFAULT TABLESPACE user\_data1 TEMPORARY TABLESPACE user\_temp;

User JOLUWADAMILARE altered.

SQL> ALTER USER BRussell DEFAULT TABLESPACE user\_data1 TEMPORARY TABLESPACE user\_temp;

User BRUSSELL altered.

SQL> ALTER USER RSeyoum DEFAULT TABLESPACE user\_data1 TEMPORARY TABLESPACE user\_temp;

User RSEYOUM altered.

## **Create Synonyms – Item 17**

SQL>

SQL> /\*Item 17 - Create synonyms\*/

SQL>

SQL> /\*Create synonym for each table from DBAUser\*/

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYCUSTOMERS

2 FOR DATADESIGNLEADUSER.CUSTOMER;

SYNONYM MYCUSTOMERS created.

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYEMPLOYEE

2 FOR DATADESIGNLEADUSER.EMPLOYEE;

SYNONYM MYEMPLOYEE created.

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYORDER\_ITEM

2 FOR DATADESIGNLEADUSER.ORDER\_ITEM;

SYNONYM MYORDER\_ITEM created.

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYORDERS

2 FOR DATADESIGNLEADUSER.ORDERS;

SYNONYM MYORDERS created.

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYPAYMENT

2 FOR DATADESIGNLEADUSER.PAYMENT;

SYNONYM MYPAYMENT created.

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYPRODUCT

2 FOR DATADESIGNLEADUSER.PRODUCT;

SYNONYM MYPRODUCT created.

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYPRODUCT\_CAT

2 FOR DATADESIGNLEADUSER.PRODUCT\_CAT;

SYNONYM MYPRODUCT\_CAT created.

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYREGION

2 FOR DATADESIGNLEADUSER.REGION;

SYNONYM MYREGION created.

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYSTORES

2 FOR DATADESIGNLEADUSER.STORES;

SYNONYM MYSTORES created.

SQL> CREATE OR REPLACE PUBLIC SYNONYM MYZIP

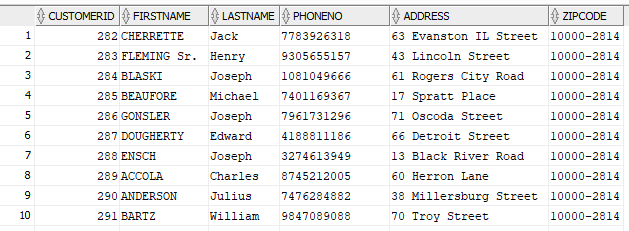
2 FOR DATADESIGNLEADUSER.ZIP;

SYNONYM MYZIP created.

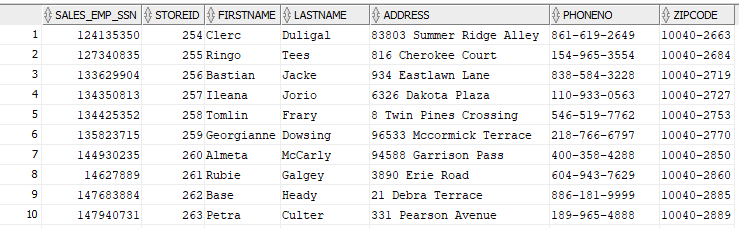
SQL>

SQL> /\*Verify synonym works\*/

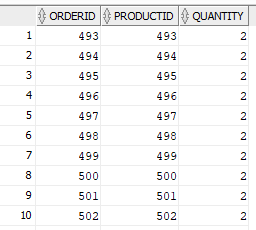
SQL> SELECT \* FROM MYCUSTOMERS;



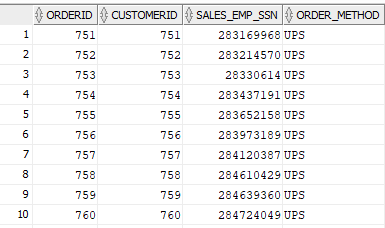
SQL> SELECT \* FROM MYEMPLOYEE;



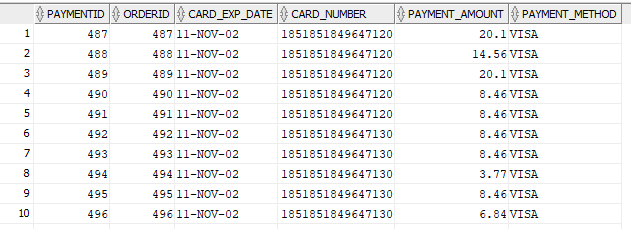
SQL> SELECT \* FROM MYORDER\_ITEM;



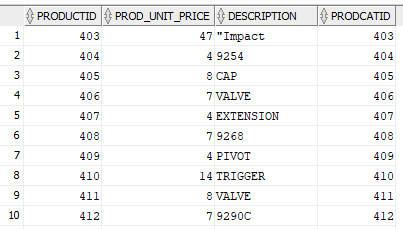
SQL> SELECT \* FROM MYORDERS;



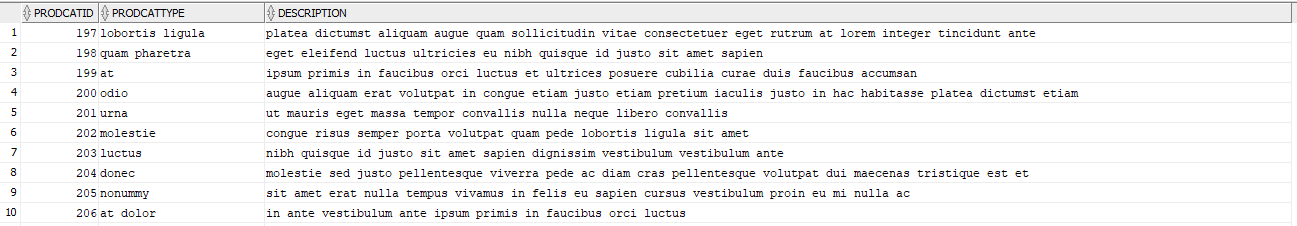
SQL> SELECT \* FROM MYPAYMENT;



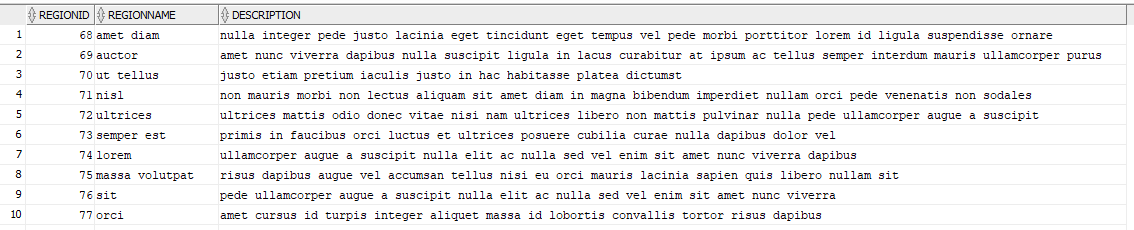
SQL> SELECT \* FROM MYPRODUCT;



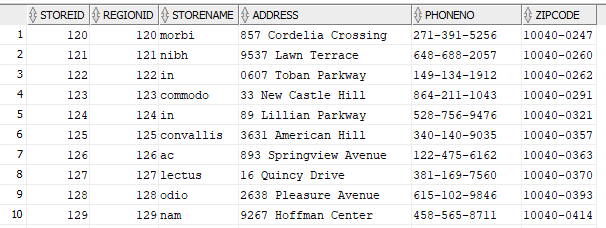
SQL> SELECT \* FROM MYPRODUCT\_CAT;



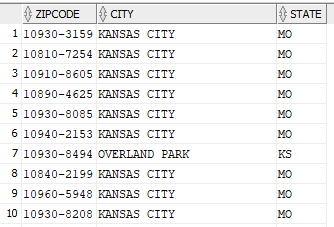
SQL> SELECT \* FROM MYREGION;



SQL> SELECT \* FROM MYSTORES;



SQL> SELECT \* FROM MYZIP;



## **Create reverse engineer on all\_objects views – Item 18**

SQL>

SQL> SET HEADING ON;

SQL> SET PAGES 999;

SQL> SET LONG 90000;

SQL>

SQL> /\*Generate DDLs for tables and indexes in DataDesignLeadUser schema\*/

SQL> SELECT

2 dbms\_metadata.GET\_DDL(object\_type,object\_name,'DATADESIGNLEADUSER')

3 FROM all\_objects

4 WHERE owner = 'DATADESIGNLEADUSER' AND (object\_type = 'TABLE' OR object\_type = 'INDEX');

DBMS\_METADATA.GET\_DDL(OBJECT\_TYPE,OBJECT\_NAME,'DATADESIGNLEADUSER')

--------------------------------------------------------------------------------

CREATE TABLE "DATADESIGNLEADUSER"."ZIP"

( "ZIPCODE" CHAR(10) NOT NULL ENABLE,

"CITY" CHAR(25),

"STATE" CHAR(2),

CONSTRAINT "PK\_ZIP" PRIMARY KEY ("ZIPCODE")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 1024000 NEXT 122880 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE

) PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255

STORAGE(

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA1"

PARTITION BY RANGE ("STATE")

(PARTITION "ZIP\_PART1" VALUES LESS THAN ('N') SEGMENT CREATION IMMEDIATE

PCTFREE 5 PCTUSED 90 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 1122304 NEXT 204800 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA1" ,

PARTITION "ZIP\_PART2" VALUES LESS THAN (MAXVALUE) SEGMENT CREATION IMMEDIATE

PCTFREE 5 PCTUSED 90 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 1122304 NEXT 204800 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA2" )

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_ZIP" ON "DATADESIGNLEADUSER"."ZIP

" ("ZIPCODE")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 1024000 NEXT 122880 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE TABLE "DATADESIGNLEADUSER"."CUSTOMER"

( "CUSTOMERID" NUMBER(10,0) NOT NULL ENABLE,

"FIRSTNAME" VARCHAR2(15),

"LASTNAME" VARCHAR2(15),

"PHONENO" CHAR(15),

"ADDRESS" VARCHAR2(35),

"ZIPCODE" CHAR(10),

CONSTRAINT "PK\_CUSTOMER\_ID" PRIMARY KEY ("CUSTOMERID")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE,

CONSTRAINT "FK\_ZIP" FOREIGN KEY ("ZIPCODE")

REFERENCES "DATADESIGNLEADUSER"."ZIP" ("ZIPCODE") ENABLE

) SEGMENT CREATION IMMEDIATE

PCTFREE 20 PCTUSED 40 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 122880 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA1"

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_CUSTOMER\_ID" ON "DATADESIGNLEADUS

ER"."CUSTOMER" ("CUSTOMERID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE TABLE "DATADESIGNLEADUSER"."PRODUCT"

( "PRODUCTID" NUMBER(10,0) NOT NULL ENABLE,

"PROD\_UNIT\_PRICE" NUMBER(10,0),

"DESCRIPTION" VARCHAR2(150),

"PRODCATID" NUMBER(10,0),

CONSTRAINT "PK\_PRODUCTID" PRIMARY KEY ("PRODUCTID")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE,

CONSTRAINT "FK\_PRODCATID" FOREIGN KEY ("PRODCATID")

REFERENCES "DATADESIGNLEADUSER"."PRODUCT\_CAT" ("PRODCATID") ENABLE

) SEGMENT CREATION IMMEDIATE

PCTFREE 5 PCTUSED 90 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 172032 NEXT 24576 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA2"

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_PRODUCTID" ON "DATADESIGNLEADUSER

"."PRODUCT" ("PRODUCTID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE TABLE "DATADESIGNLEADUSER"."REGION"

( "REGIONID" NUMBER(10,0) NOT NULL ENABLE,

"REGIONNAME" VARCHAR2(25),

"DESCRIPTION" VARCHAR2(150),

CONSTRAINT "PK\_REGION" PRIMARY KEY ("REGIONID")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE

) SEGMENT CREATION IMMEDIATE

PCTFREE 5 PCTUSED 90 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 196608 NEXT 24576 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA1"

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_REGION" ON "DATADESIGNLEADUSER"."

REGION" ("REGIONID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE TABLE "DATADESIGNLEADUSER"."STORES"

( "STOREID" NUMBER(10,0) NOT NULL ENABLE,

"REGIONID" NUMBER(10,0),

"STORENAME" VARCHAR2(15),

"ADDRESS" VARCHAR2(35),

"PHONENO" CHAR(15),

"ZIPCODE" CHAR(10),

CONSTRAINT "PK\_STORES" PRIMARY KEY ("STOREID")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE,

CONSTRAINT "FK\_STORE\_REGION" FOREIGN KEY ("REGIONID")

REFERENCES "DATADESIGNLEADUSER"."REGION" ("REGIONID") ENABLE,

CONSTRAINT "FK\_STORE\_ZIP" FOREIGN KEY ("ZIPCODE")

REFERENCES "DATADESIGNLEADUSER"."ZIP" ("ZIPCODE") ENABLE

) SEGMENT CREATION IMMEDIATE

PCTFREE 5 PCTUSED 90 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 98304 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA1"

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_STORES" ON "DATADESIGNLEADUSER"."

STORES" ("STOREID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE TABLE "DATADESIGNLEADUSER"."EMPLOYEE"

( "SALES\_EMP\_SSN" NUMBER(9,0) NOT NULL ENABLE,

"STOREID" NUMBER(10,0),

"FIRSTNAME" VARCHAR2(15),

"LASTNAME" VARCHAR2(15),

"ADDRESS" VARCHAR2(35),

"PHONENO" CHAR(15),

"ZIPCODE" CHAR(10),

CONSTRAINT "PK\_SALES\_EMP\_SSN" PRIMARY KEY ("SALES\_EMP\_SSN")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE,

CONSTRAINT "FK\_EMP\_STOREID" FOREIGN KEY ("STOREID")

REFERENCES "DATADESIGNLEADUSER"."STORES" ("STOREID") ENABLE,

CONSTRAINT "FK\_EMP\_ZIP" FOREIGN KEY ("ZIPCODE")

REFERENCES "DATADESIGNLEADUSER"."ZIP" ("ZIPCODE") ENABLE

) SEGMENT CREATION IMMEDIATE

PCTFREE 20 PCTUSED 40 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 122880 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA1"

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_SALES\_EMP\_SSN" ON "DATADESIGNLEAD

USER"."EMPLOYEE" ("SALES\_EMP\_SSN")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE TABLE "DATADESIGNLEADUSER"."ORDERS"

( "ORDERID" NUMBER(10,0) NOT NULL ENABLE,

"CUSTOMERID" NUMBER(10,0) NOT NULL ENABLE,

"SALES\_EMP\_SSN" NUMBER(9,0) NOT NULL ENABLE,

"ORDER\_METHOD" CHAR(10),

CONSTRAINT "PK\_ORDERID" PRIMARY KEY ("ORDERID")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE,

CONSTRAINT "FK\_CUSTOMERID" FOREIGN KEY ("CUSTOMERID")

REFERENCES "DATADESIGNLEADUSER"."CUSTOMER" ("CUSTOMERID") ENABLE,

CONSTRAINT "FK\_EMP\_SSN" FOREIGN KEY ("SALES\_EMP\_SSN")

REFERENCES "DATADESIGNLEADUSER"."EMPLOYEE" ("SALES\_EMP\_SSN") ENABLE

) SEGMENT CREATION IMMEDIATE

PCTFREE 5 PCTUSED 60 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 24576 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA1"

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_ORDERID" ON "DATADESIGNLEADUSER".

"ORDERS" ("ORDERID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE TABLE "DATADESIGNLEADUSER"."ORDER\_ITEM"

( "ORDERID" NUMBER(10,0) NOT NULL ENABLE,

"PRODUCTID" NUMBER(10,0),

"QUANTITY" NUMBER(10,0),

CONSTRAINT "PK\_ORDER\_ITEM" PRIMARY KEY ("ORDERID", "PRODUCTID")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE,

CONSTRAINT "FK\_ORDER\_ID1" FOREIGN KEY ("ORDERID")

REFERENCES "DATADESIGNLEADUSER"."ORDERS" ("ORDERID") ENABLE,

CONSTRAINT "FK\_PRODUCT\_ID" FOREIGN KEY ("PRODUCTID")

REFERENCES "DATADESIGNLEADUSER"."PRODUCT" ("PRODUCTID") ENABLE

) SEGMENT CREATION IMMEDIATE

PCTFREE 5 PCTUSED 90 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 16384 NEXT 24576 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA2"

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_ORDER\_ITEM" ON "DATADESIGNLEADUSE

R"."ORDER\_ITEM" ("ORDERID", "PRODUCTID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE TABLE "DATADESIGNLEADUSER"."PAYMENT"

( "PAYMENTID" NUMBER(10,0) NOT NULL ENABLE,

"ORDERID" NUMBER(10,0),

"CARD\_EXP\_DATE" DATE,

"CARD\_NUMBER" NUMBER(30,0),

"PAYMENT\_AMOUNT" NUMBER(20,2),

"PAYMENT\_METHOD" VARCHAR2(5),

CONSTRAINT "PK\_PAYMENTID" PRIMARY KEY ("PAYMENTID")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE,

CONSTRAINT "FK\_ORDER\_ID2" FOREIGN KEY ("ORDERID")

REFERENCES "DATADESIGNLEADUSER"."ORDERS" ("ORDERID") ENABLE

) SEGMENT CREATION IMMEDIATE

PCTFREE 20 PCTUSED 40 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 40960 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA2"

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_PAYMENTID" ON "DATADESIGNLEADUSER

"."PAYMENT" ("PAYMENTID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE TABLE "DATADESIGNLEADUSER"."PRODUCT\_CAT"

( "PRODCATID" NUMBER(10,0) NOT NULL ENABLE,

"PRODCATTYPE" VARCHAR2(25),

"DESCRIPTION" VARCHAR2(150),

CONSTRAINT "PK\_PRODCAT" PRIMARY KEY ("PRODCATID")

USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1" ENABLE

) SEGMENT CREATION IMMEDIATE

PCTFREE 5 PCTUSED 90 INITRANS 1 MAXTRANS 255

NOCOMPRESS LOGGING

STORAGE(INITIAL 196608 NEXT 24576 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_DATA1"

CREATE UNIQUE INDEX "DATADESIGNLEADUSER"."PK\_PRODCAT" ON "DATADESIGNLEADUSER".

"PRODUCT\_CAT" ("PRODCATID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_ZIP" ON "DATADESIGNLEADUSER"."CUSTOMER"

("ZIPCODE")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_CUSTOMERID" ON "DATADESIGNLEADUSER"."ORD

ERS" ("CUSTOMERID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_ORDER\_ID1" ON "DATADESIGNLEADUSER"."ORDE

R\_ITEM" ("ORDERID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_PRODUCT\_ID" ON "DATADESIGNLEADUSER"."ORD

ER\_ITEM" ("PRODUCTID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_ORDER\_ID2" ON "DATADESIGNLEADUSER"."PAYM

ENT" ("ORDERID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_EMP\_STOREID" ON "DATADESIGNLEADUSER"."EM

PLOYEE" ("STOREID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_EMP\_ZIP" ON "DATADESIGNLEADUSER"."EMPLOY

EE" ("ZIPCODE")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_STORE\_REGION" ON "DATADESIGNLEADUSER"."S

TORES" ("REGIONID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_STORE\_ZIP" ON "DATADESIGNLEADUSER"."STOR

ES" ("ZIPCODE")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_PRODCATID" ON "DATADESIGNLEADUSER"."PROD

UCT" ("PRODCATID")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

CREATE INDEX "DATADESIGNLEADUSER"."FK\_EMP\_SSN" ON "DATADESIGNLEADUSER"."ORDERS

" ("SALES\_EMP\_SSN")

PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS

STORAGE(INITIAL 57344 NEXT 16384 MINEXTENTS 1 MAXEXTENTS 2147483645

PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1

BUFFER\_POOL DEFAULT FLASH\_CACHE DEFAULT CELL\_FLASH\_CACHE DEFAULT)

TABLESPACE "USER\_INDX1"

31 rows selected.

## **Create script to detect end-user and what they are running – Item 19**

SQL> /\*Item 19 - Script to detect end user and what they are running\*/

SQL> SET LINESIZE 100;

SQL> SELECT a.sid, a.username, optimizer\_mode, cpu\_time, elapsed\_time, sql\_text

2 FROM v$sqlarea sqlarea, v$session a

3 WHERE a.sql\_hash\_value = sqlarea.hash\_value

4 AND a.sql\_address = sqlarea.address AND a.username is not null;

