**Report “Lab 7”**

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# Create and populate Dimension of TIME DW – Layer

I have created tablespace and user, granted roles to user:

CREATE TABLESPACE ts\_dw

DATAFILE 'db\_qpt\_dw\_01.dat'

SIZE 200M

AUTOEXTEND ON NEXT 100M

SEGMENT SPACE MANAGEMENT AUTO;

CREATE USER u\_dw

IDENTIFIED BY "%PWD%"

DEFAULT TABLESPACE ts\_dw

QUOTA UNLIMITED ON ts\_dw;

GRANT RESOURCE, CONNECT TO u\_dw;

Time period: 01.01.2012-31.12.2012

## Task 01: CREATE DW.T\_DAYS

I have created table T\_DAYS:

CREATE TABLE T\_DAYS AS

SELECT

TRUNC( sd + rn ) time\_id,

TO\_CHAR( sd + rn, 'fmDay' ) day\_name,

TO\_CHAR( sd + rn, 'D' ) day\_number\_in\_week,

TO\_CHAR( sd + rn, 'DD' ) day\_number\_in\_month,

TO\_CHAR( sd + rn, 'DDD' ) day\_number\_in\_year

FROM

(

SELECT

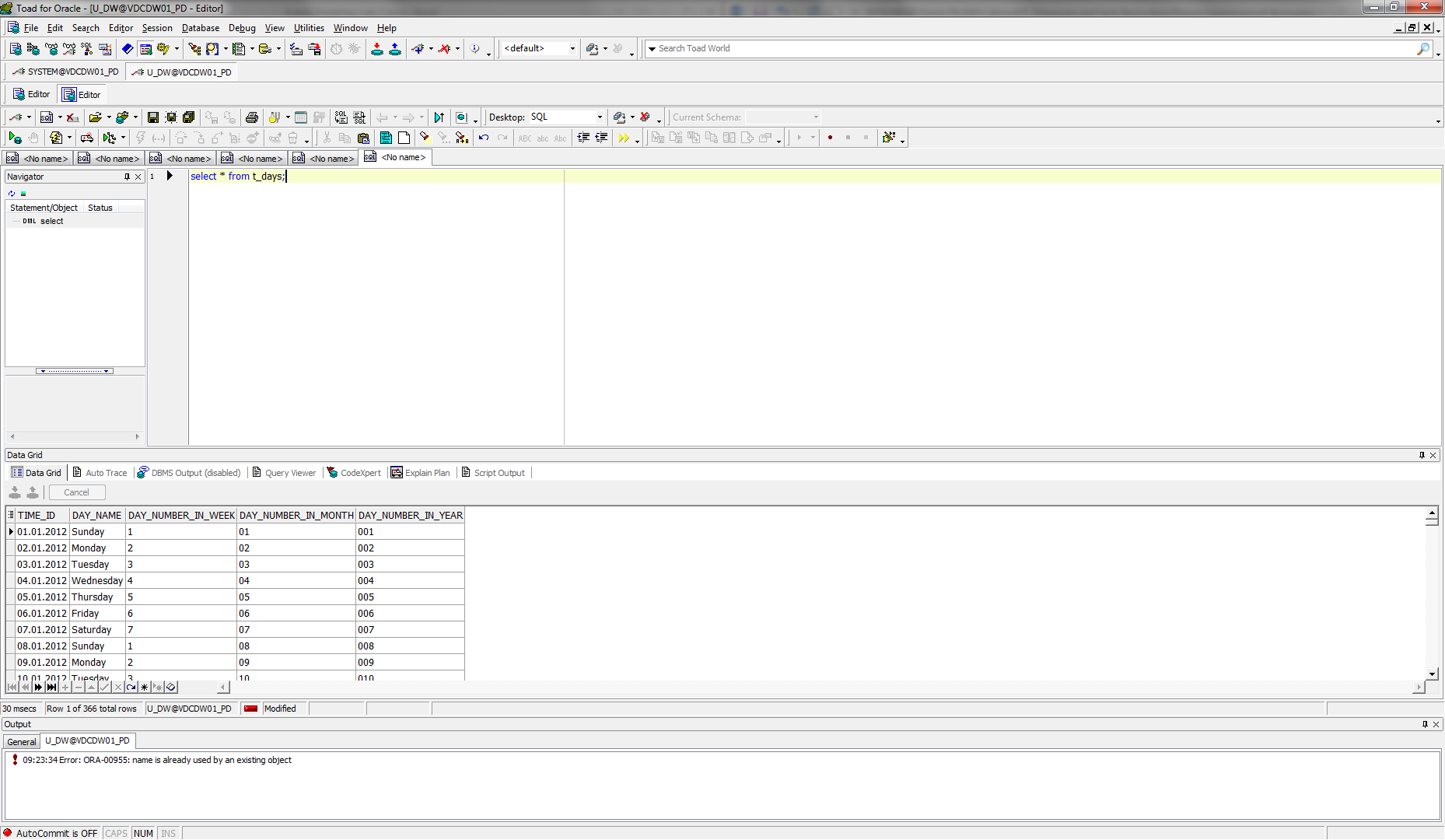
TO\_DATE( '12/31/2011', 'MM/DD/YYYY' ) sd,

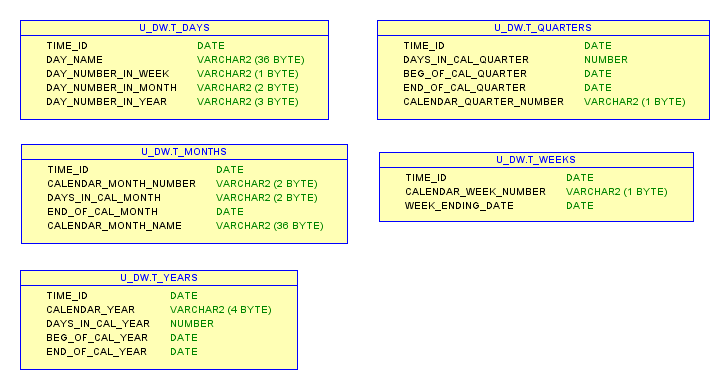
rownum rn

FROM dual

CONNECT BY level <= 366

);





## Task 02: CREATE DW.T\_WEEKS

I have created table T\_WEEKS:

CREATE TABLE T\_WEEKS AS

SELECT

TRUNC( sd + rn ) time\_id,

TO\_CHAR( sd + rn, 'W' ) calendar\_week\_number,

( CASE

WHEN TO\_CHAR( sd + rn, 'D' ) IN ( 1, 2, 3, 4, 5, 6 ) THEN

NEXT\_DAY( sd + rn, 'Saturday' )

ELSE

( sd + rn )

END ) week\_ending\_date

FROM

(

SELECT

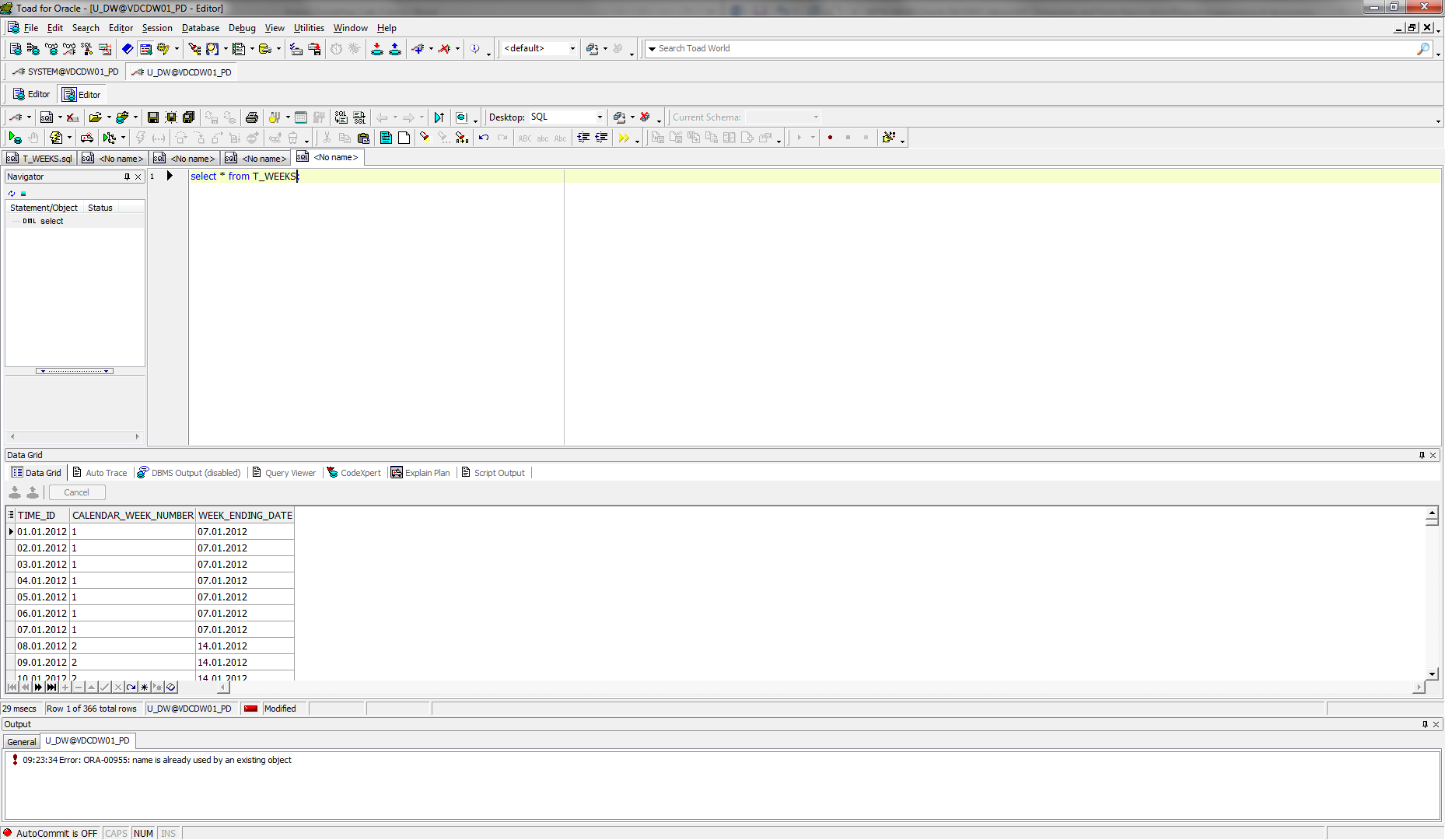
TO\_DATE( '12/31/2011', 'MM/DD/YYYY' ) sd,

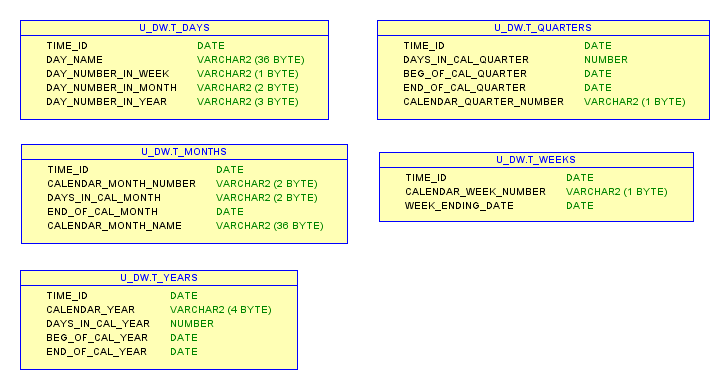
rownum rn

FROM dual

CONNECT BY level <= 366

);





## Task 03: CREATE DW.T\_MONTHS

I have created table T\_MONTHS:

CREATE TABLE T\_MONTHS AS

SELECT

TRUNC( sd + rn ) time\_id,

TO\_CHAR( sd + rn, 'MM' ) calendar\_month\_number,

TO\_CHAR( LAST\_DAY( sd + rn ), 'DD' ) days\_in\_cal\_month,

LAST\_DAY( sd + rn ) end\_of\_cal\_month,

TO\_CHAR( sd + rn, 'FMMonth' ) calendar\_month\_name

FROM

(

SELECT

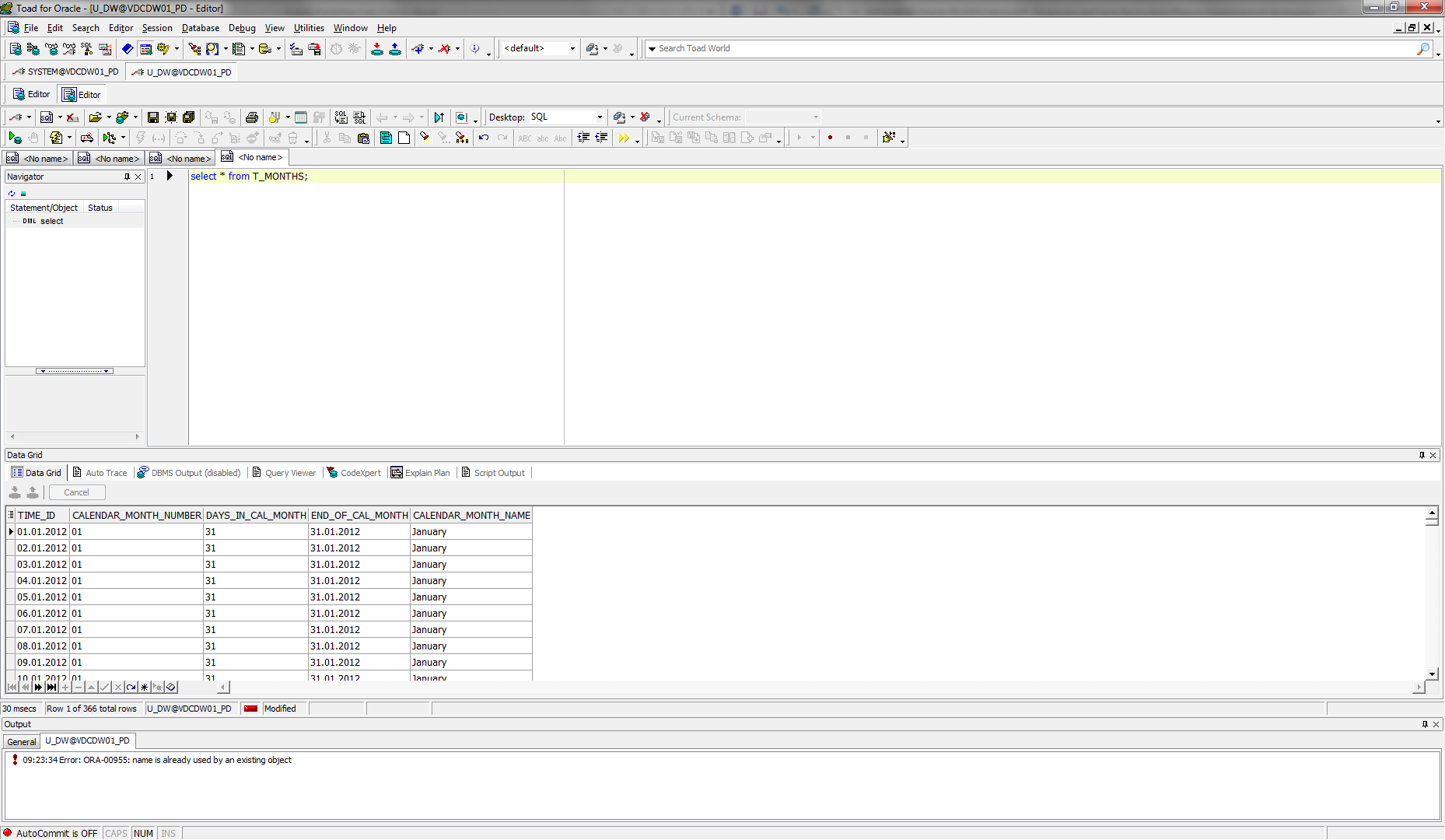
TO\_DATE( '12/31/2011', 'MM/DD/YYYY' ) sd,

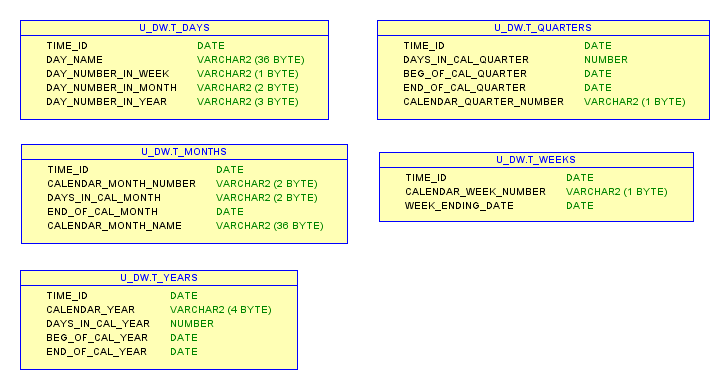
rownum rn

FROM dual

CONNECT BY level <= 366

);





## Task 04: CREATE DW.T\_QUARTERS

I have created table T\_QUARTERS:

CREATE TABLE T\_QUARTERS AS

SELECT

TRUNC( sd + rn ) time\_id,

( ( CASE

WHEN TO\_CHAR( sd + rn, 'Q' ) = 1 THEN

TO\_DATE( '03/31/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' )

WHEN TO\_CHAR( sd + rn, 'Q' ) = 2 THEN

TO\_DATE( '06/30/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' )

WHEN TO\_CHAR( sd + rn, 'Q' ) = 3 THEN

TO\_DATE( '09/30/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' )

WHEN TO\_CHAR( sd + rn, 'Q' ) = 4 THEN

TO\_DATE( '12/31/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' )

END ) - TRUNC( sd + rn, 'Q' ) + 1 ) days\_in\_cal\_quarter,

TRUNC( sd + rn, 'Q' ) beg\_of\_cal\_quarter,

( CASE

WHEN TO\_CHAR( sd + rn, 'Q' ) = 1 THEN

TO\_DATE( '03/31/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' )

WHEN TO\_CHAR( sd + rn, 'Q' ) = 2 THEN

TO\_DATE( '06/30/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' )

WHEN TO\_CHAR( sd + rn, 'Q' ) = 3 THEN

TO\_DATE( '09/30/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' )

WHEN TO\_CHAR( sd + rn, 'Q' ) = 4 THEN

TO\_DATE( '12/31/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' )

END ) end\_of\_cal\_quarter,

TO\_CHAR( sd + rn, 'Q' ) calendar\_quarter\_number

FROM

(

SELECT

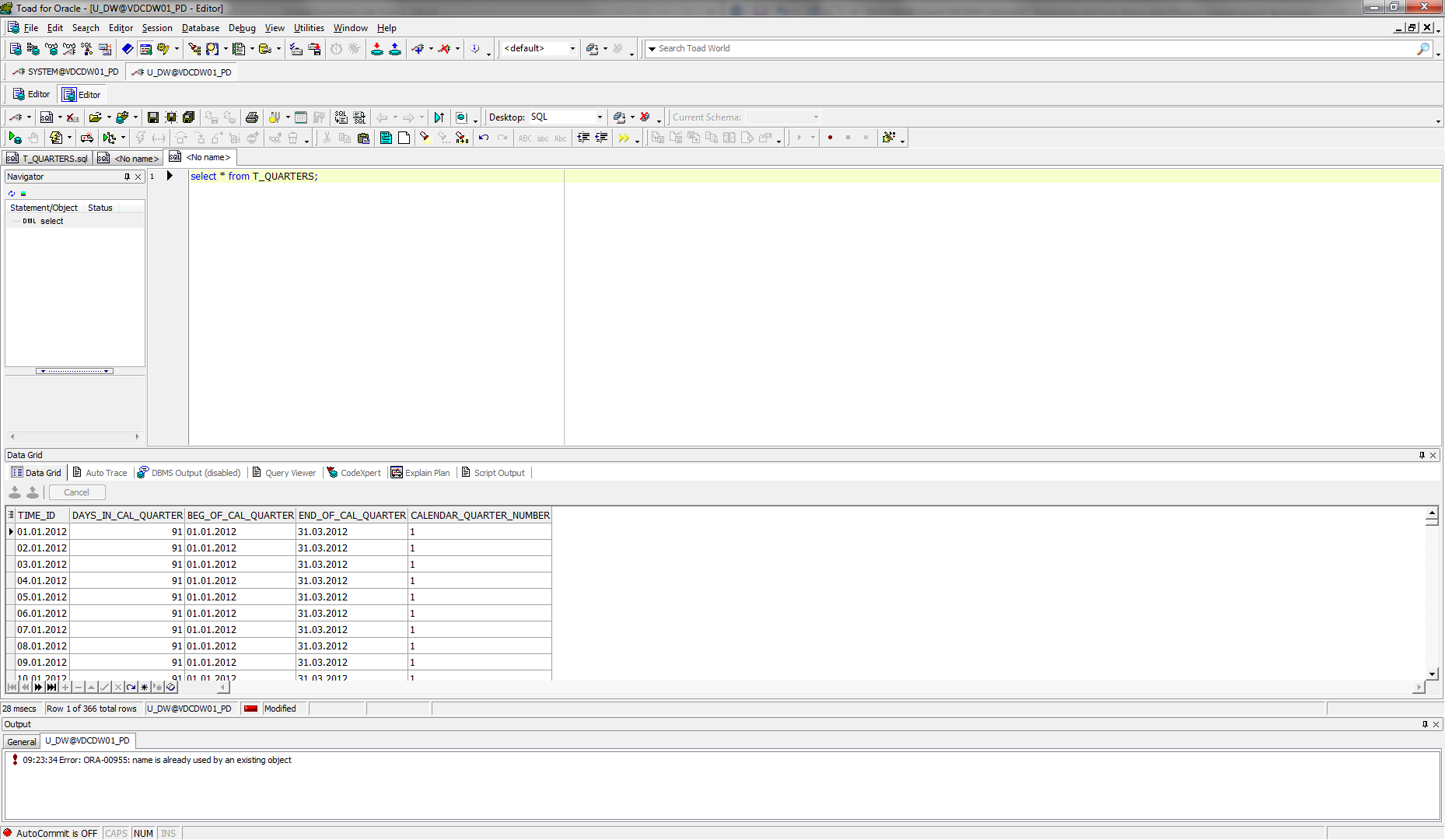
TO\_DATE( '12/31/2011', 'MM/DD/YYYY' ) sd,

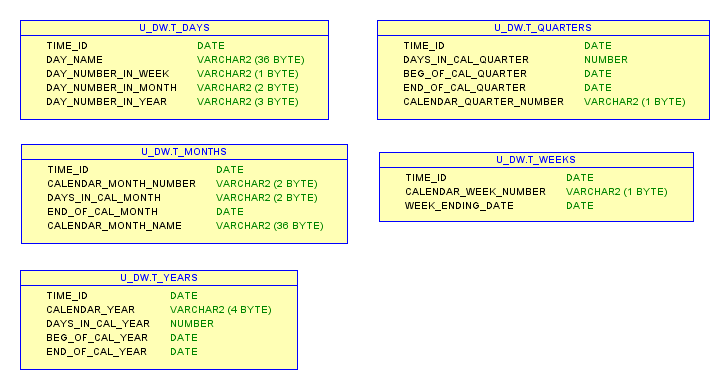
rownum rn

FROM dual

CONNECT BY level <= 366

);





## Task 05: CREATE DW.T\_YEARS

I have created table T\_YEARS:

CREATE TABLE T\_YEARS AS

SELECT

TRUNC( sd + rn ) time\_id,

TO\_CHAR( sd + rn, 'YYYY' ) calendar\_year,

( TO\_DATE( '12/31/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' )

- TRUNC( sd + rn, 'YEAR' ) ) days\_in\_cal\_year,

TRUNC( sd + rn, 'YEAR' ) beg\_of\_cal\_year,

TO\_DATE( '12/31/' || TO\_CHAR( sd + rn, 'YYYY' ), 'MM/DD/YYYY' ) end\_of\_cal\_year

FROM

(

SELECT

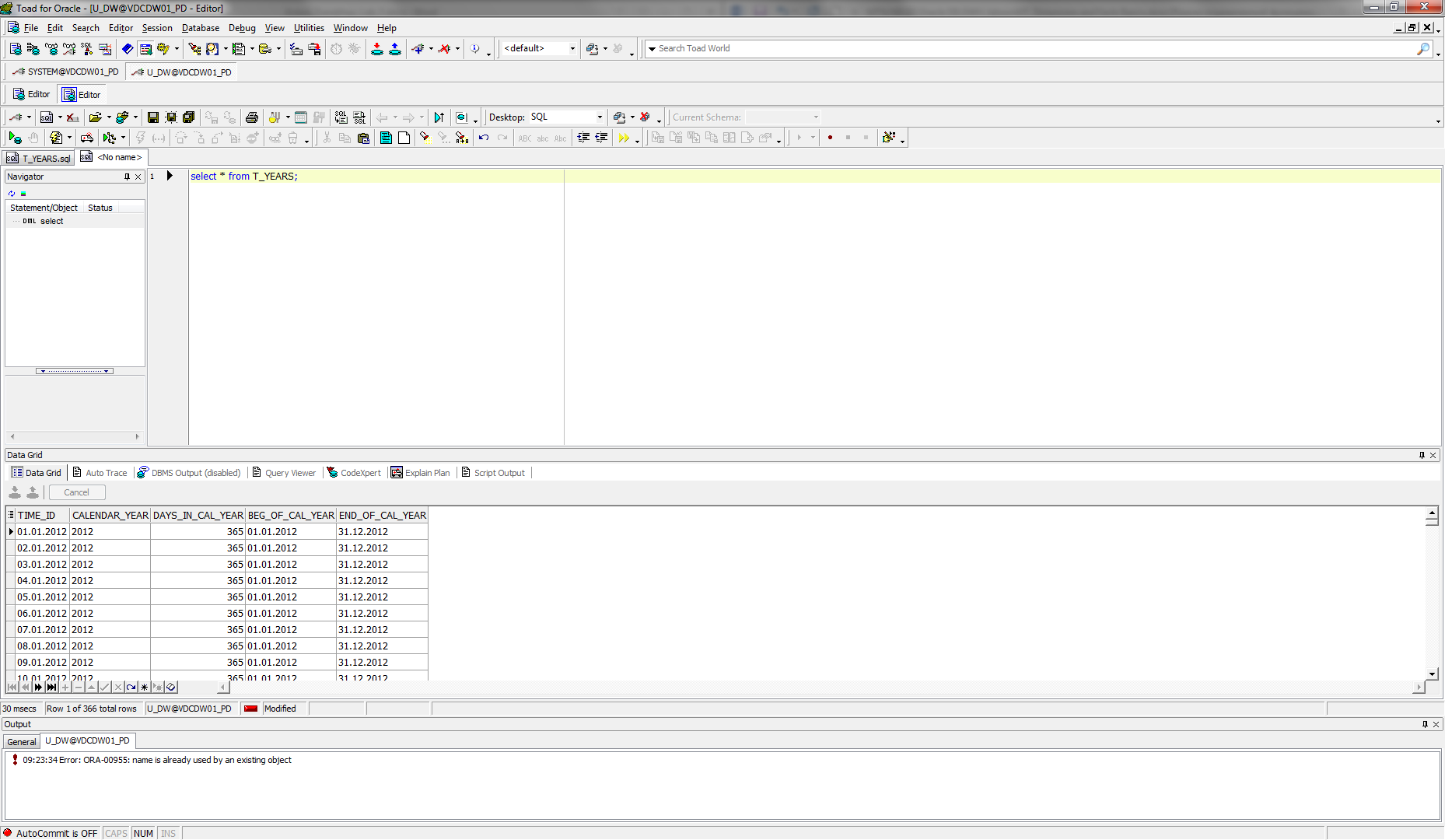
TO\_DATE( '12/31/2011', 'MM/DD/YYYY' ) sd,

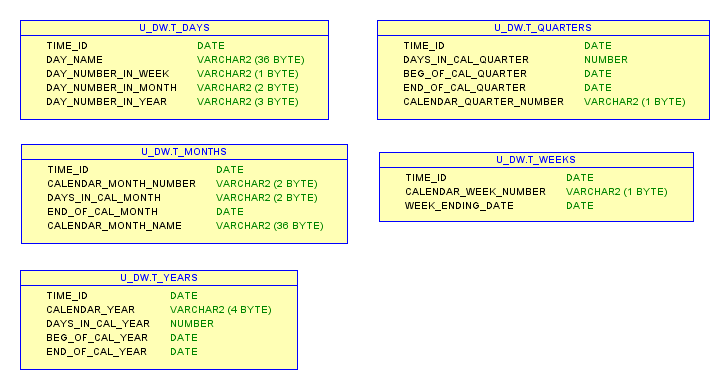
rownum rn

FROM dual

CONNECT BY level <= 366

);





The diagram with all tables:

