## Task 01: CREATE DW.T\_DAYS

CREATE TABLE t\_days AS SELECT

time\_id day\_id,

calendar\_week\_number || '-' || calendar\_month\_number || '-' || calendar\_year week\_id,

day\_name,

day\_number\_in\_week,

day\_number\_in\_month,

day\_number\_in\_year

FROM

(

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,

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,

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,

( ( 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,

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( '12/31/2002', 'MM/DD/YYYY' ) sd,

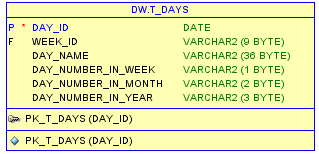
rownum rn

FROM dual

CONNECT BY level <= 200

)

);



## Task 02: CREATE DW.T\_WEEKS

CREATE TABLE t\_weeks AS SELECT DISTINCT

calendar\_week\_number || '-' || calendar\_month\_number || '-' || calendar\_year week\_id,

calendar\_month\_number || '-' || calendar\_year month\_id,

calendar\_week\_number

FROM

(

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,

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,

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,

( ( 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,

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( '12/31/2002', 'MM/DD/YYYY' ) sd,

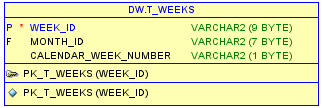
rownum rn

FROM dual

CONNECT BY level <= 200

)

);



## Task 03: CREATE DW.T\_MONTHS

CREATE TABLE t\_months AS SELECT DISTINCT

calendar\_month\_number || '-' || calendar\_year month\_id,

calendar\_quarter\_number || '-' || calendar\_year quarter\_id,

calendar\_month\_name,

calendar\_month\_number,

days\_in\_cal\_month,

end\_of\_cal\_month

FROM

(

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,

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,

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,

( ( 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,

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( '12/31/2002', 'MM/DD/YYYY' ) sd,

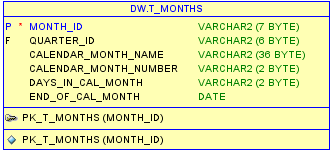
rownum rn

FROM dual

CONNECT BY level <= 200

)

);



## Task 04: CREATE DW.T\_QUARTERS

CREATE TABLE t\_quarters AS SELECT DISTINCT

calendar\_quarter\_number || '-' || calendar\_year quarter\_id,

calendar\_year year\_id,

calendar\_quarter\_number,

days\_in\_cal\_quarter,

beg\_of\_cal\_quarter,

end\_of\_cal\_quarter

FROM

(

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,

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,

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,

( ( 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,

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( '12/31/2002', 'MM/DD/YYYY' ) sd,

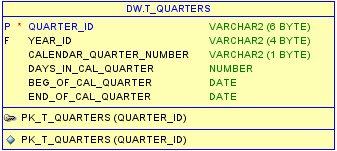
rownum rn

FROM dual

CONNECT BY level <= 200

)

);



## Task 05: CREATE DW.T\_YEARS

CREATE TABLE t\_years AS SELECT DISTINCT

calendar\_year year\_id,

calendar\_year,

days\_in\_cal\_year,

beg\_of\_cal\_year,

end\_of\_cal\_year

FROM

(

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,

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,

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,

( ( 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,

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( '12/31/2002', 'MM/DD/YYYY' ) sd,

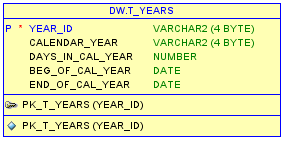
rownum rn

FROM dual

CONNECT BY level <= 200

)

);



## CREATE CONSTRAINTS

ALTER TABLE t\_years

ADD CONSTRAINT

pk\_t\_y PRIMARY KEY ( year\_id );

ALTER TABLE t\_quarters

ADD CONSTRAINT

pk\_t\_q PRIMARY KEY ( quarter\_id );

ALTER TABLE t\_months

ADD CONSTRAINT

pk\_t\_m PRIMARY KEY ( month\_id );

ALTER TABLE t\_weeks

ADD CONSTRAINT

pk\_t\_w PRIMARY KEY ( week\_id );

ALTER TABLE t\_days

ADD CONSTRAINT

pk\_t\_d PRIMARY KEY ( day\_id );

ALTER TABLE t\_quarters

ADD CONSTRAINT fk\_q FOREIGN KEY (year\_id)

REFERENCES t\_years (year\_id);

ALTER TABLE t\_months

ADD CONSTRAINT fk\_m FOREIGN KEY (quarter\_id)

REFERENCES t\_quarters (quarter\_id);

ALTER TABLE t\_weeks

ADD CONSTRAINT fk\_w FOREIGN KEY (month\_id)

REFERENCES t\_months (month\_id);

ALTER TABLE t\_days

ADD CONSTRAINT fk\_d FOREIGN KEY (week\_id)

REFERENCES t\_weeks (week\_id);

