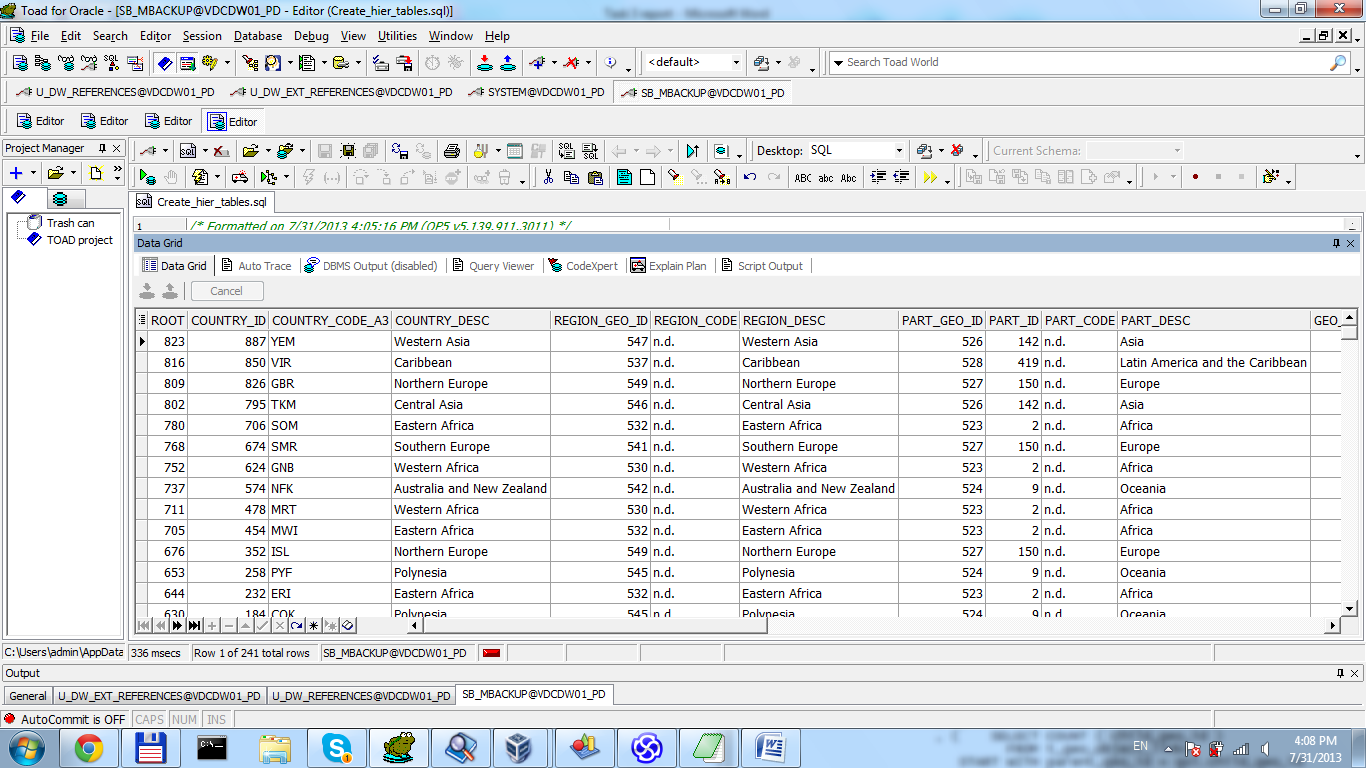
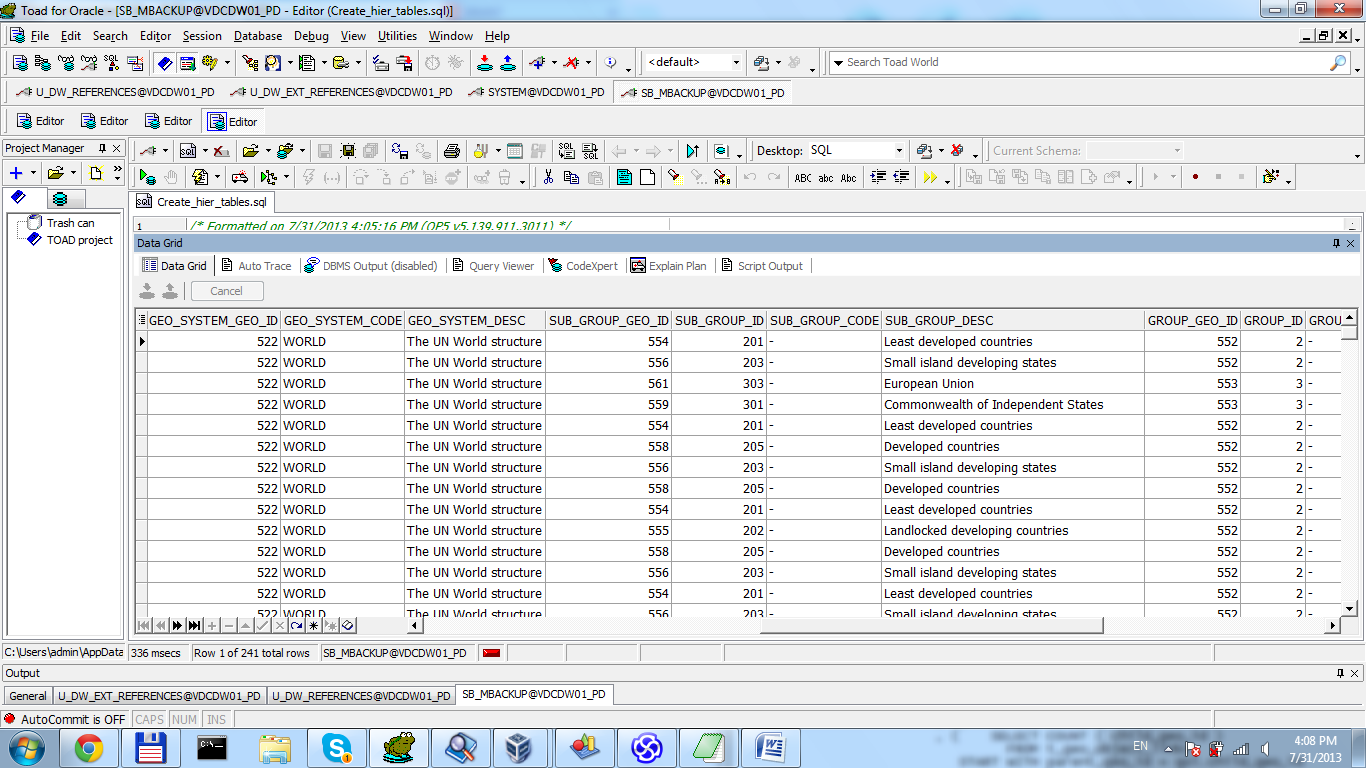
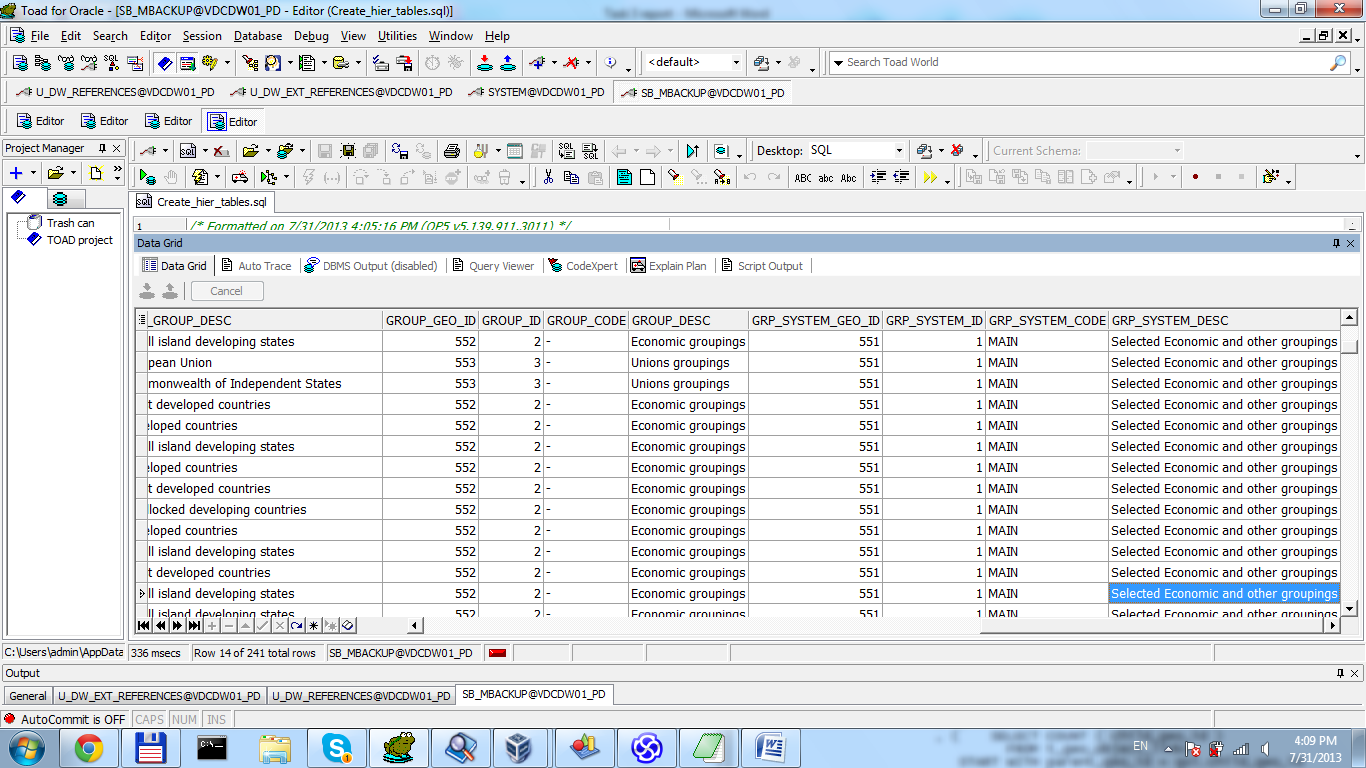
Data from denormalized table:







Query for create:

*/\* Formatted on 7/31/2013 4:05:16 PM (QP5 v5.139.911.3011) \*/*

CREATE TABLE denormalized\_geo

AS

SELECT root

, country\_id

, country\_code\_a3

, region\_desc AS country\_desc

*--region*

, NVL ( l\_3, -99 ) AS region\_geo\_id

, NVL ( region\_code, 'n.d.' ) AS region\_code

, NVL ( region\_desc, 'n.d.' ) AS region\_desc

*-- part*

, NVL ( l\_2, -99 ) AS part\_geo\_id

, NVL ( part\_id, -99 ) AS part\_id

, NVL ( part\_code, 'n.d.' ) AS part\_code

, NVL ( part\_desc, 'n.d.' ) AS part\_desc

*-- geo\_systems*

, NVL ( l\_1, -99 ) AS geo\_system\_geo\_id

, NVL ( geo\_system\_code, 'n.d.' ) AS geo\_system\_code

, NVL ( geo\_system\_desc, 'n.d.' ) AS geo\_system\_desc

*-- group\_items*

, NVL ( l\_6, -99 ) AS sub\_group\_geo\_id

, NVL ( sub\_group\_id, -99 ) AS sub\_group\_id

, NVL ( sub\_group\_code, 'n.d.' ) AS sub\_group\_code

, NVL ( sub\_group\_desc, 'n.d.' ) AS sub\_group\_desc

*-- groups*

, NVL ( l\_5, -99 ) AS group\_geo\_id

, NVL ( GROUP\_ID, -99 ) AS GROUP\_ID

, NVL ( group\_code, 'n.d.' ) AS group\_code

, NVL ( group\_desc, 'n.d.' ) AS group\_desc

*-- group system*

, NVL ( l\_4, -99 ) AS grp\_system\_geo\_id

, NVL ( grp\_system\_id, -99 ) AS grp\_system\_id

, NVL ( grp\_system\_code, 'n.d.' ) AS grp\_system\_code

, NVL ( grp\_system\_desc, 'n.d.' ) AS grp\_system\_desc

FROM ( ( SELECT \*

FROM ( SELECT parent\_geo\_id AS geo\_id

, CONNECT\_BY\_ROOT child\_geo\_id AS root

, link\_type\_id

FROM u\_dw\_references.t\_geo\_object\_links

START WITH child\_geo\_id IN (SELECT DISTINCT geo\_id

FROM u\_dw\_references.lc\_countries)

CONNECT BY PRIOR parent\_geo\_id = child\_geo\_id) PIVOT (MAX ( geo\_id )

FOR link\_type\_id

IN (1 AS l\_1

, 2 AS l\_2

, 3 AS l\_3

, 4 AS l\_4

, 5 AS l\_5

, 6 AS l\_6))

LEFT JOIN u\_dw\_references.lc\_countries lc

ON ( root = lc.geo\_id )

LEFT JOIN u\_dw\_references.lc\_geo\_regions reg

ON ( l\_3 = reg.geo\_id )

LEFT JOIN u\_dw\_references.lc\_geo\_parts par

ON ( l\_2 = par.geo\_id )

LEFT JOIN u\_dw\_references.lc\_geo\_systems sys

ON ( l\_1 = sys.geo\_id )

LEFT JOIN (SELECT \*

FROM u\_dw\_references.cu\_cntr\_group\_systems

UNION

SELECT geo\_id \* 2

, grp\_system\_id

, grp\_system\_code

, grp\_system\_desc

, localization\_id

FROM u\_dw\_references.cu\_cntr\_group\_systems) gr\_sys

ON ( l\_4 = gr\_sys.geo\_id )

LEFT JOIN u\_dw\_references.cu\_cntr\_groups cu

ON ( l\_5 = cu.geo\_id )

LEFT JOIN u\_dw\_references.cu\_cntr\_sub\_groups sub

ON ( l\_6 = sub.geo\_id ) ));

Create path\_table:

CREATE TABLE path\_table

AS

SELECT SYS\_CONNECT\_BY\_PATH ( child\_geo\_id

, '\' )

geo\_path

, child\_geo\_id

, LEVEL AS "level"

, CONNECT\_BY\_ROOT child\_geo\_id AS root

, CASE

WHEN CONNECT\_BY\_ISLEAF = 1 THEN 'LEAF'

WHEN LEVEL = 1 THEN 'ROOT'

ELSE 'BRANCH'

END

AS status

, DECODE ( CONNECT\_BY\_ISLEAF

, 1, NULL

, ( SELECT COUNT ( child\_geo\_id )

FROM u\_dw\_references.t\_geo\_object\_links

START WITH parent\_geo\_id = mb.child\_geo\_id

CONNECT BY PRIOR child\_geo\_id = parent\_geo\_id ) )

child\_count

FROM (SELECT \*

FROM u\_dw\_references.t\_geo\_object\_links

UNION

SELECT NULL

, geo\_id

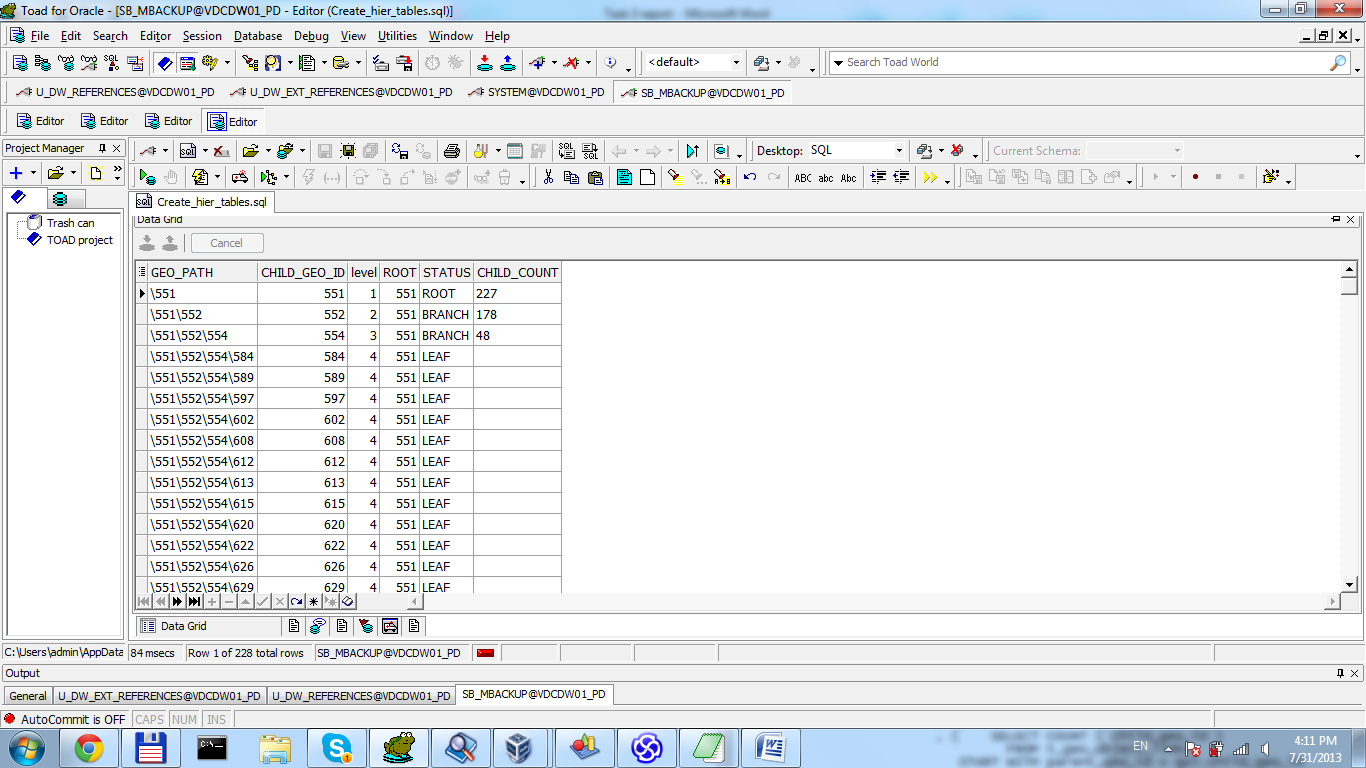
, NULL

FROM u\_dw\_references.lc\_cntr\_group\_systems) mb

START WITH parent\_geo\_id IS NULL

CONNECT BY parent\_geo\_id = PRIOR child\_geo\_id;

Data:



Script create user user

create tablespace SB\_MBackUp datafile 'DATA1.dbf' size 5 M LOGGING

create user SB\_MBackUp identified by pass default tablespace SB\_MBackUp quota unlimited on SB\_MBackUp

grant select any table to SB\_MBackUp

grant connect, resource to SB\_MBackUp

Task 2

Analyze product hierarchy:

Query:

*/\* Formatted on 7/31/2013 6:35:31 PM (QP5 v5.139.911.3011) \*/*

CREATE TABLE prod\_links

AS

SELECT prod\_id

, prod\_category\_id

FROM ext\_products;

SELECT LPAD ( ' '

, LEVEL \* 4 )

|| prod\_name

prod\_heirarchy

, DECODE ( CONNECT\_BY\_ISLEAF

, 1, '--'

, ( SELECT COUNT ( prod\_id )

FROM prod\_links

START WITH prod\_category\_id = co.prod\_id

CONNECT BY prod\_category\_id = PRIOR prod\_id ) )

count\_products\_titles

, prod\_desc product\_description

, income\_coef

FROM (SELECT \*

FROM (SELECT fir.prod\_id

, fir.prod\_category\_id

, sec.prod\_name

, sec.prod\_desc

, sec.income\_coef

FROM (SELECT \*

FROM prod\_links

UNION

SELECT prod\_category\_id

, NULL

FROM prod\_links) fir

JOIN

(SELECT prod\_id

, prod\_name

, prod\_desc

, income\_coef

FROM ext\_products

UNION

SELECT prod\_category\_id

, prod\_category

, NULL

, NULL

FROM ext\_prod\_categories) sec

ON fir.prod\_id = sec.prod\_id)) co

WHERE LEVEL = 2

OR prod\_id > 100

START WITH prod\_id = prod\_id

CONNECT BY prod\_category\_id = PRIOR prod\_id;

Dataset:

