

UMBC

IS 722: Systems & Information Integration

Project Deliverable III: Integrating information from multiple repositories

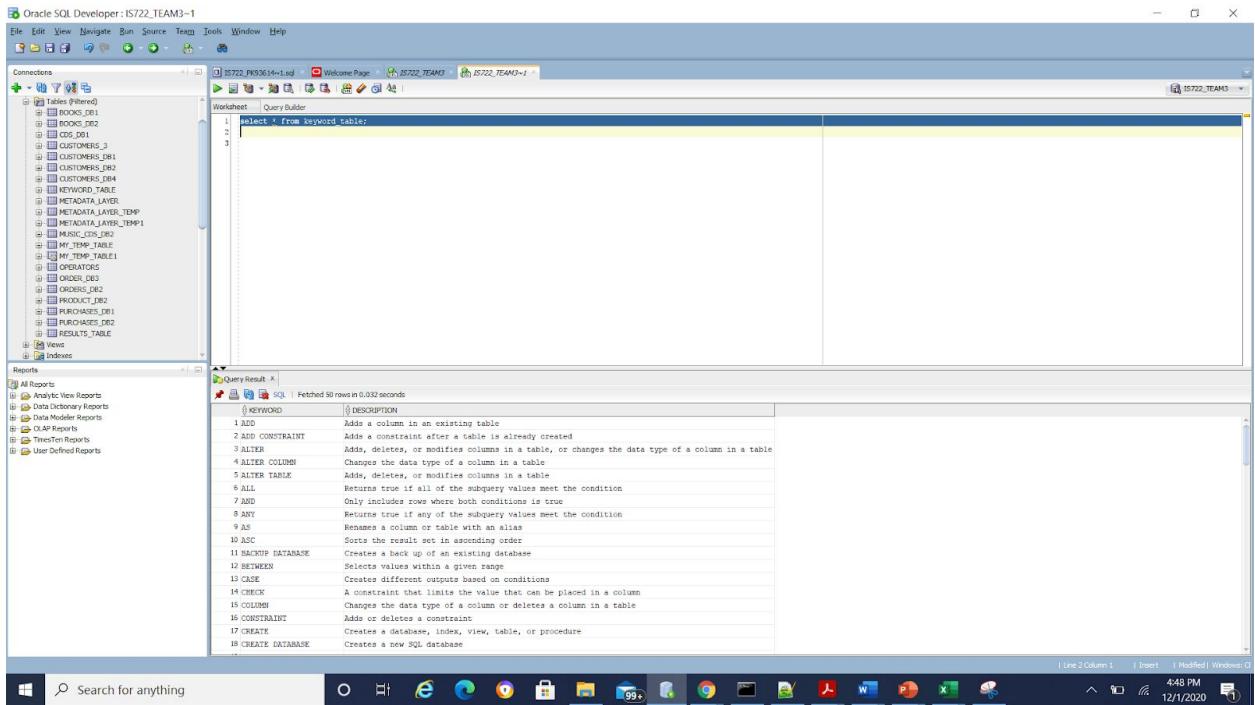
TEAM 3

DUE BEFORE 2 DECEMBER 2020 4 30 PM

1. **Demo.** This is the major part. It shows all you have learned from the entire course. You will run the system in real-time and you will show the entire class the flow of certain scenarios (global queries) as they are passing through the system. Prepare a script with the global queries and the appropriate calls. This script should start with DELETE commands, and then CREATE TABLE commands, etc. The script starts on a clean database, populates it, and runs the code. Make sure to show:
 - a. [15 pts] **Global query.** The global query as a string
 - b. [55 pts] **Subqueries.** Each subquery as it has been automatically generated by your system
 - c. [15 pts] **Partial Results.** The temporary tables that contain the results for each submitted subquery to each local database
 - d. [15 pts] **Overall result.** The consolidated result of multiple subqueries

SOLUTIONS:

Scenarios exhibition: KEYWORD TABLE



Case 1: Search for all books that have been authored by a specific author of your choice

Input query:

A) GLOBAL QUERY

'SELECT book_title FROM books_db WHERE author_first = "Philip"'; (global query)

```

28 | db4_column_data_type varchar2(100),
29 | db4_function_name varchar2(100)
30 | );
31 |
32 |DECLARE
33 | QUERYZ VARCHAR2 (400) :='SELECT book_title FROM books_db WHERE author_first = ''Philip''';
34 | TOKENS VARCHAR(300);
35 |BEGIN
36 |FOR TOKEN IN (SELECT REGEXP_SUBSTR(QUERYZ,'[^ ,]+',1,LEVEL) TEXTS FROM DUAL
37 | CONNECT BY REGEXP_SUBSTR(QUERYZ, ' ',1,LEVEL-1) IS NOT NULL)
38 |LOOP
39 | TOKENS := TOKEN.TEXTS;
40 |INSERT INTO MY_TEMP_TABLE (TOKEN) VALUES(TOKENS);
41 | DBMS_OUTPUT.PUT_LINE(TOKENS);
42 |END LOOP;
43 |END;
44 |
45 |

```

Tokenizer output:

```
Table METADATA_LAYER_TEMP created.

SELECT
book_title
FROM
books_db
WHERE
author_first
=
'Philip'

PL/SQL procedure successfully completed.
```

b) SUBQUERIES OUTPUT: FROM ALL LOCAL DBS 1,2,3,4 RESPONSES

```
Table RESULTS_TABLE1 dropped.

Table RESULTS_TABLE1 created.

SELECT books_db1.title FROM books_db1 WHERE books_db1.author_first = 'Philip'
1 , book0
SELECT null FROM null WHERE null = 'Philip'
NO TABLE OR RELEVANT COLUMN
SELECT null FROM null WHERE null = 'Philip'
NO TABLE OR RELEVANT COLUMN
SELECT books_db2.b2_title FROM books_db2 WHERE books_db2.b2_authors = 'Philip'
1 , life of drip

PL/SQL procedure successfully completed.

>>Query Run In:Query Result
```

C) PARTIAL RESULTS:

Temporary table 1:

Oracle SQL Developer : IS722_TEAM3 (Unshared)

File Edit View Navigate Run Source Team Tools Window Help

Connectors

IS722_PM93614>1.sql Welcome Page IS722_TEAMS IS722_TEAM3 (Unshared) 4.43100023 seconds

Worksheet Query Builder

```
231 UNION
232 SELECT * FROM RESULTS_TEMP2
233 UNION
234 SELECT * FROM RESULTS_TEMP3;
235
236
237
238
239
240
241
242 select * from results_temp;
```

Script Output X Query Result X Query Result 1 X Query Result 2 X Query Result 3 X Query Result 4 X

SQL All Rows Fetched: 1 in 0.025 seconds

Reports

All Reports Analytic View Reports Data Dictionary Reports Data Modeler Reports DAP Reports ThreeTen Reports User Defined Reports

Click on an identifier with the Control key down to perform "Go to Declaration"

Line 243 Column 1 Insert Modified Windows 102 PM 12/2/2020

This screenshot shows the Oracle SQL Developer interface. The central workspace displays a query in the 'Worksheet' tab:

```
231 UNION
232 SELECT * FROM RESULTS_TEMP2
233 UNION
234 SELECT * FROM RESULTS_TEMP3;
235
236
237
238
239
240
241
242 select * from results_temp;
```

The output pane below shows the result of the query:

1 book0

Temporary table 2:

Oracle SQL Developer : IS722_TEAM3 (Unshared)

File Edit View Navigate Run Source Team Tools Window Help

Connectors

IS722_PM93614>1.sql Welcome Page IS722_TEAMS IS722_TEAM3 (Unshared) 4.43100023 seconds

Worksheet Query Builder

```
241
242 select * from results_temp;
243
244 select * from results_temp1;
245
246 select * from results_temp2;
247
248 select * from results_temp3;
```

Script Output X Query Result X Query Result 1 X Query Result 2 X Query Result 3 X Query Result 4 X

SQL All Rows Fetched: 0 in 0.028 seconds

Reports

All Reports Analytic View Reports Data Dictionary Reports Data Modeler Reports DAP Reports ThreeTen Reports User Defined Reports

Click on an identifier with the Control key down to perform "Go to Declaration"

Line 244 Column 1 Insert Modified Windows 103 PM 12/2/2020

This screenshot shows the Oracle SQL Developer interface. The central workspace displays a query in the 'Worksheet' tab:

```
241
242 select * from results_temp;
243
244 select * from results_temp1;
245
246 select * from results_temp2;
247
248 select * from results_temp3;
```

The output pane below shows the result of the query:

col1

Temporary table 3:

Oracle SQL Developer : IS722_TEAM3 (Unshared)

File Edit View Navigate Run Source Team Tools Window Help

Connectors

IS722_PM93614>1.sql Welcome Page IS722_TEAMS IS722_TEAM3 (Unshared) 4.43100023 seconds

Worksheet - Query Builder

```

241 select * from results_temp;
242
243 select * from results_temp1;
244
245 select * from results_temp2;
246
247 select * from results_temp3;
248
249

```

Script Output X | Query Result X | Query Result 1 X | Query Result 2 X | Query Result 3 X | Query Result 4 X

SQL All Rows Fetched 0 in 0.00 seconds

COOL

Reports

All Reports Analytic View Reports Data Dictionary Reports Data Modeler Reports DAP Reports ThreeTen Reports User Defined Reports

Start Identifier with the Control key down to perform "Go to Declaration" Search for anything 104 PM 12/2/2020

This screenshot shows the Oracle SQL Developer interface with four separate queries running in parallel. The queries are identical, each selecting all columns from a temporary table named 'results_temp'. The results pane indicates that no rows were fetched.

Temporary table 4:

Oracle SQL Developer : IS722_TEAM3 (Unshared)

File Edit View Navigate Run Source Team Tools Window Help

Connectors

IS722_PM93614>1.sql Welcome Page IS722_TEAMS IS722_TEAM3 (Unshared) 4.43100023 seconds

Worksheet - Query Builder

```

241 select * from results_temp;
242
243 select * from results_temp1;
244
245 select * from results_temp2;
246
247 select * from results_temp3;
248
249

```

Script Output X | Query Result X | Query Result 1 X | Query Result 2 X | Query Result 3 X | Query Result 4 X

SQL All Rows Fetched 1 in 0.028 seconds

B2_TITLE
life of drip

Reports

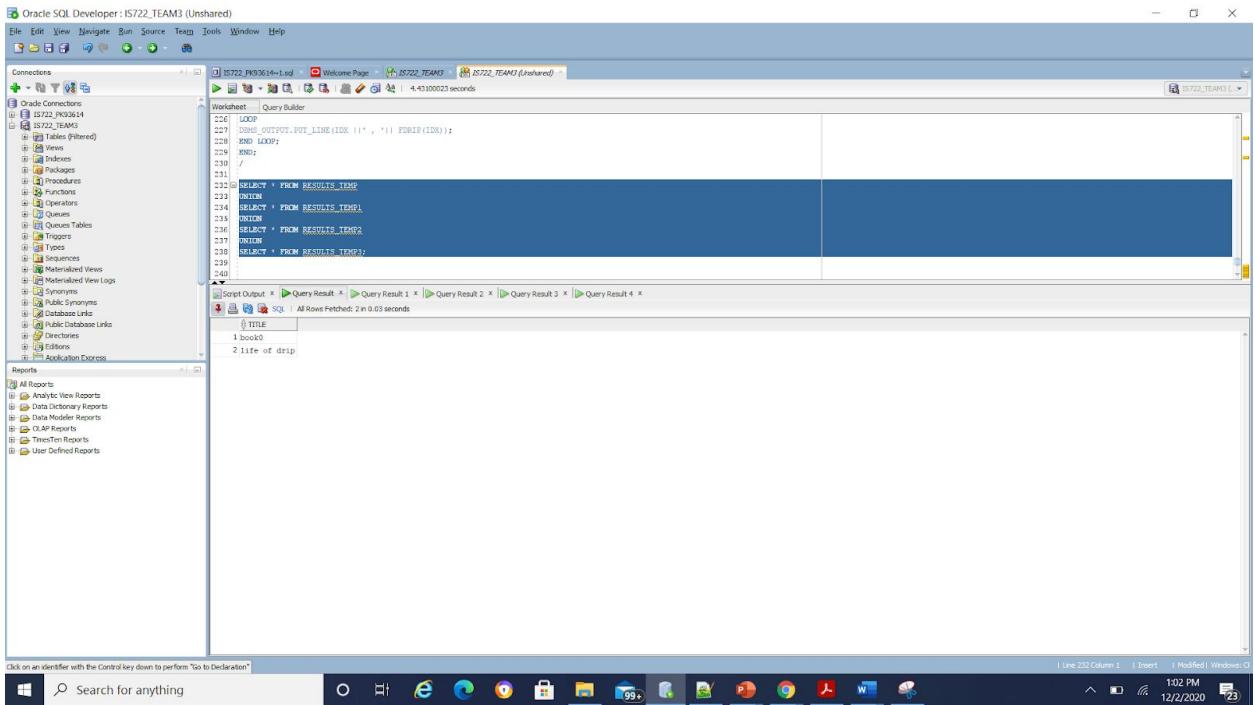
All Reports Analytic View Reports Data Dictionary Reports Data Modeler Reports DAP Reports ThreeTen Reports User Defined Reports

Click on an identifier with the Control key down to perform "Go to Declaration" Search for anything 104 PM 12/2/2020

This screenshot shows the Oracle SQL Developer interface with a single query running. The query selects all columns from a temporary table named 'results_temp'. The results pane shows one row was fetched, with the title 'B2_TITLE' and the value 'life of drip'.

D) CONSOLIDATED QUERY:

Put together the results of the subqueries by using a UNION operation. Make sure you have union compatible results to demonstrate this case



Case 2: Search for all CDs that feature a specific artist

Input query:

A) GLOBAL QUERY

'SELECT cds_title FROM cds_db WHERE artists = "lil_baby"'; (global query)

```

31 |
32 ┌ DECLARE
33 | QUERYZ VARCHAR2 (400) :='SELECT cds_title FROM cds_db WHERE artists = "lil_baby"';
34 | TOKENS VARCHAR(300);
35 | BEGIN
36 ┌ FOR TOKEN IN (SELECT REGEXP_SUBSTR(QUERYZ,'[^ ,]+',1,LEVEL) TEXTS FROM DUAL
37 | CONNECT BY REGEXP_SUBSTR(QUERYZ,' ',1,LEVEL-1) IS NOT NULL)
38 | LOOP
39 | TOKENS := TOKEN.TEXTS;
40 | INSERT INTO MY_TEMP_TABLE (TOKEN) VALUES(TOKENS);
41 | DBMS_OUTPUT.PUT_LINE(TOKENS);
42 | END LOOP;
43 | END;
44 |

```

Tokenizer output:

```

Table METADATA_LAYER_TEMP created.

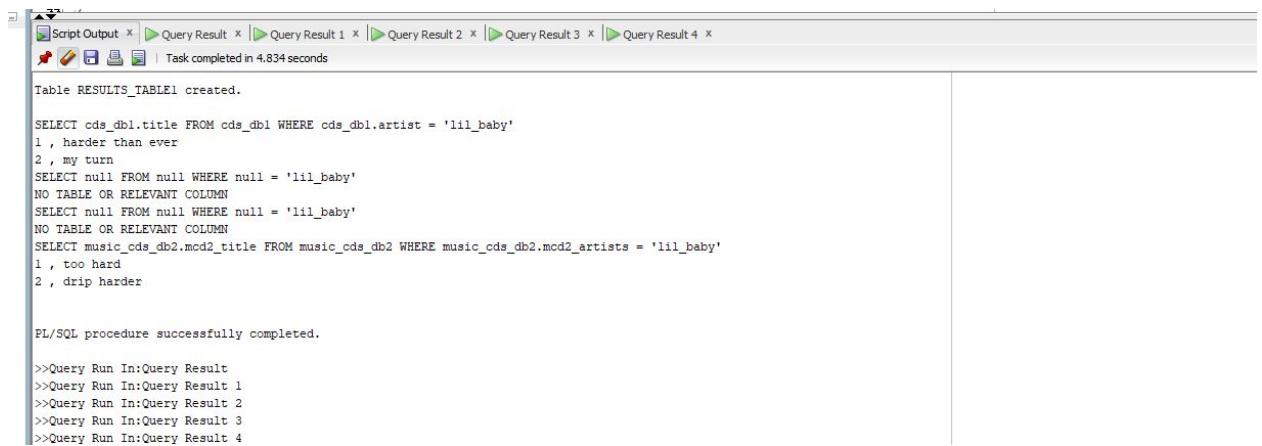
SELECT
cds_title
FROM
cds_db
WHERE
artists
=
'lil_baby'

PL/SQL procedure successfully completed.

4 rows updated.

```

b) OUTPUT: FROM ALL LOCAL DBS 1,2,3,4 RESPONSES



The screenshot shows the Oracle SQL Developer interface with several tabs open in the top bar: Script Output, Query Result, Query Result 1, Query Result 2, Query Result 3, and Query Result 4. The Script Output tab contains the following SQL code and its execution results:

```

Table RESULTS_TABLE1 created.

SELECT cds dbl.title FROM cds dbl WHERE cds dbl.artist = 'lil_baby'
1 , harder than ever
2 , my turn
SELECT null FROM null WHERE null = 'lil_baby'
NO TABLE OR RELEVANT COLUMN
SELECT null FROM null WHERE null = 'lil_baby'
NO TABLE OR RELEVANT COLUMN
SELECT music_cds_db2.mcd2_title FROM music_cds_db2 WHERE music_cds_db2.mcd2_artists = 'lil_baby'
1 , too hard
2 , drip harder

PL/SQL procedure successfully completed.

>>Query Run In:Query Result
>>Query Run In:Query Result 1
>>Query Run In:Query Result 2
>>Query Run In:Query Result 3
>>Query Run In:Query Result 4

```

c)

Temporary table 1:

Oracle SQL Developer : IS722_TEAM3 (Unshared) ... I

File Edit View Navigate Run Source Team Tools Window Help

Connectors

IS722_TEAM3

IS722_TEAM3

Table (Filtered)

Views

Indexes

Packages

Procedures

Functions

Operators

Queues

Queues Tables

Triggers

Types

Sequences

Materialized Views

Materialized View Logs

Synonyms

Public Synonyms

Database Links

Directories

Editors

Application Express

Worksheet Query Builder

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

select * from results_temp;

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 |

All Rows Fetched: 2 in 0.05 seconds

Reports

All Reports

Analytic View Reports

Data Dictionary Reports

Data Modeler Reports

OLAP Reports

TreeTen Reports

User Defined Reports

TITLE

1 harder than ever

2 my turn

Line 256 Column 1 Insert Modified Windows

12/2/2020 1:11 PM 23

Temporary table 2:

Oracle SQL Developer : IS722_TEAM3 (Unshared) ... I

File Edit View Navigate Run Source Team Tools Window Help

Connectors

IS722_TEAM3

IS722_TEAM3

Table (Filtered)

Views

Indexes

Packages

Procedures

Functions

Operators

Queues

Queues Tables

Triggers

Types

Sequences

Materialized Views

Materialized View Logs

Synonyms

Public Synonyms

Database Links

Directories

Editors

Application Express

Worksheet Query Builder

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

select * from results_temp;

select * from results_temp;

select * from results_temp;

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 |

All Rows Fetched: 0 in 0.037 seconds

Reports

All Reports

Analytic View Reports

Data Dictionary Reports

Data Modeler Reports

OLAP Reports

TreeTen Reports

User Defined Reports

TITLE

COL1

Line 259 Column 1 Insert Modified Windows

12/2/2020 1:12 PM 23

Temporary table 3:

The screenshot shows the Oracle SQL Developer interface. The top menu bar includes File, Edit, View, Navigate, Run, Source, Team, Tools, Window, and Help. The title bar indicates the connection is to IS722_TEAM3 (Unshared). The left sidebar contains a Connections tree with a single entry for IS722_TEAM3, and a Reports section listing various report types. The main workspace has a Worksheet tab selected, displaying a script with several SELECT statements. Below the worksheet is a Script Output panel showing five tabs: Query Result 1 through 4, and a fifth tab labeled COL1 which displays the message "All Rows Petched: 0 in 0.023 seconds". The bottom status bar shows the current line and column (Line 261 Column 3), and icons for Insert, Modified, and Windows.

Temporary table 4:

The screenshot shows the Oracle SQL Developer interface. The left sidebar contains the 'Connections' tree, which is currently expanded to show 'IS722_TEAM3_1'. Under this connection, several schema objects are listed: Tables (Filtered), Views, Indexes, Triggers, Procedures, Functions, Operators, Queues, Local Tables, Triggers, Types, Sequences, Materialized Views, Materialized View Log, Synonyms, Public Synonyms, Database Links, Table Database Links, Directories, Editors, and Application Express. Below the connections tree is the 'Reports' section, which lists various report types: All Reports, Analytic View Reports, Data Dictionary Reports, Data Modeler Reports, OLAP Reports, ThreeTen Reports, and User Defined Reports.

The main workspace is titled 'IS722_TEAM3_1'. It displays a 'Worksheet' tab with the following SQL code:

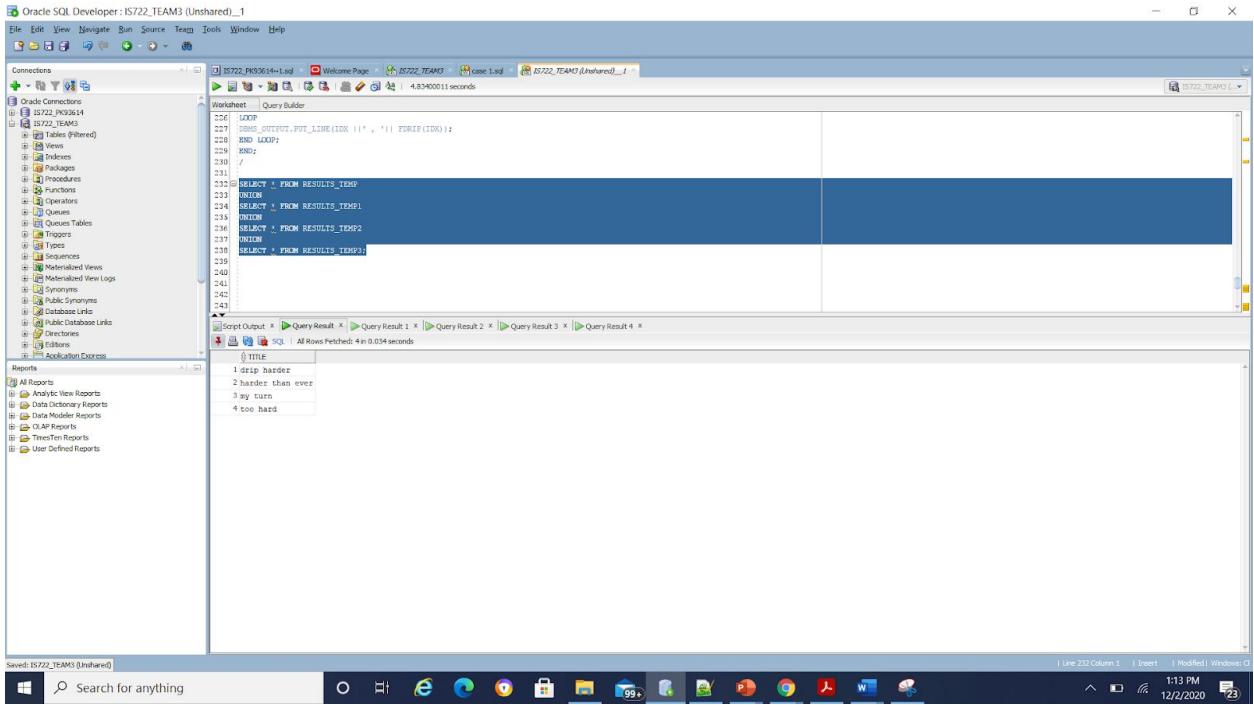
```
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257 select * from results_temp;  
258  
259 select * from results_temp;  
260  
261 select * from results_temp;  
262  
263  
264 select * from results_temp;
```

The 'Script Output' tab shows the results of the execution:

```
All Rows Petched: 2 in 0.02 seconds
```

The bottom status bar indicates the current line and column numbers (Line 263 Column 1), and the modified status (Modified). The system tray shows the date and time as 12/2/2020 1:12 PM.

D) Put together the results of the subqueries by using a UNION operation. Make sure you have union compatible results to demonstrate this case



CASE 3: Display a few columns from each order in the local databases

A) GLOBAL QUERY

```
'SELECT purchase_id, purchase_date FROM purchases_db WHERE purchase_date > "25-MAY-19"; ( global query)
```

```
1 DECLARE
2  QUERYZ VARCHAR2 (400) := 'SELECT purchase_id, purchase_date FROM purchases_db WHERE purchase_date > ''25-MAY-19''' ;
3  TOKENS VARCHAR(300);
4  BEGIN
5    FOR TOKEN IN (SELECT REGEXP_SUBSTR(QUERYZ,'[^ ,]+',1,LEVEL) TEXTS FROM DUAL
6      CONNECT BY REGEXP_SUBSTR(QUERYZ,' ',1,LEVEL-1) IS NOT NULL)
7    LOOP
8      TOKENS := TOKEN.TEXTS;
9      INSERT INTO MY_TEMP_TABLE (TOKEN) VALUES(TOKENS);
10     DBMS_OUTPUT.PUT_LINE(TOKENS);
11   END LOOP;
12 END;
13 /
```

Tokenizer output:

```
- - - - -  
Table METADATA_LAYER_TEMP created.
```

```
SELECT  
purchase_id  
purchase_date  
FROM  
purchases_db  
WHERE  
purchase_date  
>  
'25-MAY-19'
```

```
PL/SQL procedure successfully completed.
```

b) OUTPUT: FROM ALL LOCAL DBS 1,2,3,4 RESPONSES

```
Table RESULTS_TABLE1 created.  
  
SELECT purchases_db1.purchase_id,purchases_db1.purchase_date FROM purchases_db1 WHERE purchases_db1.purchase_date>'25-MAY-19'  
1 , 8482620 , 03-MAR-20  
2 , 1879962 , 30-JUN-20  
SELECT orders_db2.o_id,orders_db2.o_date FROM orders_db2 WHERE orders_db2.o_date>'25-MAY-19'  
1 , 101 , 02-FEB-20  
2 , 102 , 03-FEB-20  
3 , 103 , 04-FEB-20  
4 , 104 , 05-FEB-20  
5 , 105 , 02-FEB-20  
SELECT order_db3.order_id,order_db3.order_date FROM order_db3 WHERE order_db3.order_date>'25-MAY-19'  
1 , 1010 , 20-SEP-20  
2 , 1011 , 20-SEP-20  
3 , 1012 , 20-SEP-20  
4 , 1013 , 20-SEP-20  
SELECT purchases_db2.p2_purchase_id,purchases_db2.p2_purchase_date FROM purchases_db2 WHERE purchases_db2.p2_purchase_date>'25-MAY-19'  
  
PL/SQL procedure successfully completed.
```

C)

Temporary table1:

The screenshot shows the Oracle SQL Developer interface. The top menu bar includes File, Edit, View, Navigate, Run, Source, Team, Tools, Window, and Help. The left sidebar contains a 'Connectors' section with 'Oracls Connections' and a tree view for the 'IS722_TEAMS' database, listing various schema objects like Tables, Views, Packages, Procedures, Functions, Operators, Types, and Synonyms. Below this is a 'Reports' section with options like Analytic View Reports, Data Dictionary Reports, Data Modeler Reports, OLAP Reports, and User Defined Reports. The main workspace shows a query builder with the following code:

```
SELECT * FROM RESULTS_TMP;
SELECT * FROM RESULTS_TMP;
```

Below the code, there are tabs for Script Output, SQL, and five Query Result tabs. The first Query Result tab displays the following data:

PURCHASE_ID	PURCHASE_DATE
1	04/26/20 03:HSR-20
2	18/9/20 30:JUN-20

The bottom status bar indicates 'Line 279 Column 1' and '1:24 PM 12/2/2020'. The system tray icons include a power button, network, battery, volume, and date/time.

Temporary table 2:

Temporary table 3:

The screenshot shows the Oracle SQL Developer interface. The left sidebar displays the 'Connectors' and 'Reports' sections. The main area has tabs for 'Worksheet' and 'Query Builder'. The 'Worksheet' tab contains the following SQL code:

```
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
```

The 'Reports' section on the left lists various report types and their sub-options.

The bottom part of the interface shows the 'Script Output' and several 'Query Result' tabs. The 'Query Result 1' tab is active, displaying the following data:

ORDER_ID	ORDER_DATE
1	101020-SEP-20
2	101120-SEP-20
3	101220-SEP-20
4	101320-SEP-20

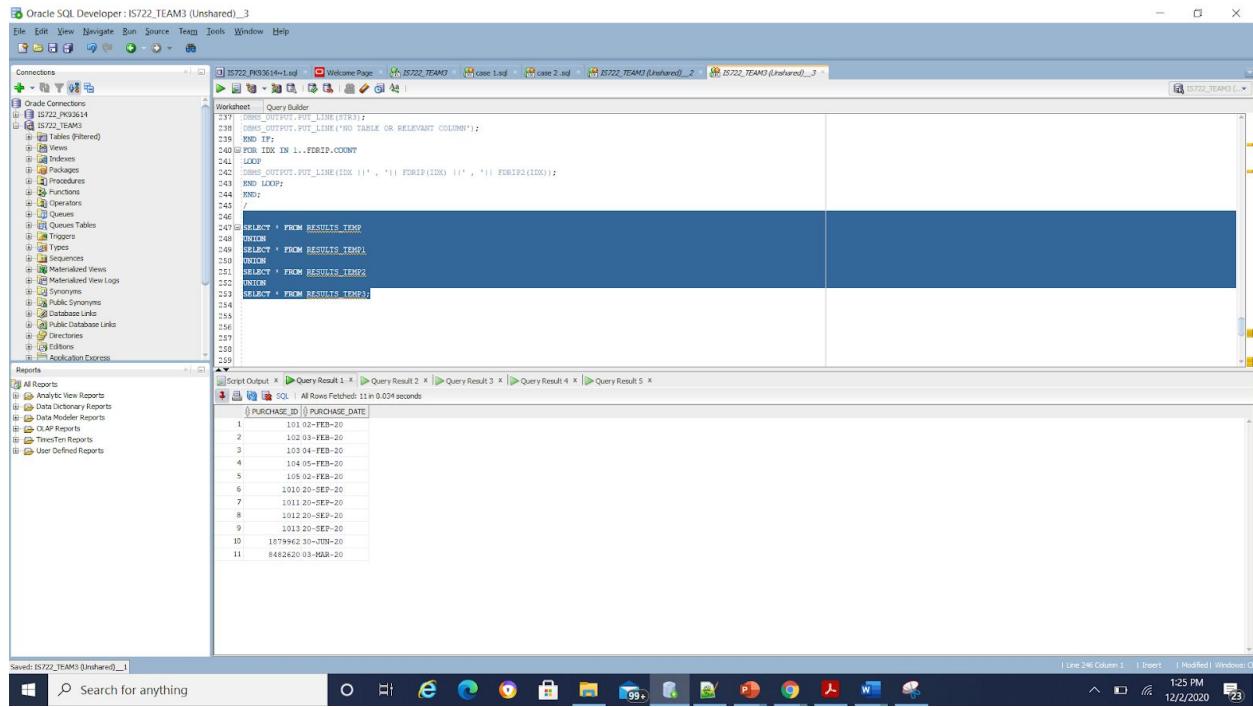
Temporary table 4:

The screenshot shows the Oracle SQL Developer interface with the following details:

- Title Bar:** Oracle SQL Developer : IS722_TEAM3 (Unshared) _3
- Menu Bar:** File, Edit, View, Navigate, Run, Source, Team, Tools, Window, Help
- Connections Sidebar:** Oracle Connections, showing connections to IS722_P09304 and IS722_TEAM3.
- Worksheet Tab:** IS722_P09304+1.sql, Welcome Page, IS722_TEAM3, case 1.sql, case 2.sql, IS722_TEAM3 (Unshared) _2, IS722_TEAM3 (Unshared) _3.
- Query Builder Tab:** IS722_TEAM3 (Unshared) _3.
- Central Area:** A large text area containing a multi-line SQL query. The query includes several SELECT statements from a temporary table named RESULTS_TEMP, interspersed with comments and numbers (274-286).

```
274
275
276
277
278
279 SELECT * FROM RESULTS_TEMP ;
280
281 SELECT * FROM RESULTS_TEMP1;
282
283 SELECT * FROM RESULTS_TEMP2;
284
285 SELECT * FROM RESULTS_TEMP3;
```
- Reports Sidebar:** All Reports, Analysis View Reports, Data Dictionary Reports, Data Modeler Reports, OLAP Reports, TimeSeries Reports, User Defined Reports.
- Bottom Status Bar:** Line 286 Column 1, Insert, Modified, Windows G.
- Taskbar:** Shows various application icons including Microsoft Edge, File Explorer, and other system icons.
- System Tray:** Shows the date and time as 12/2/2020 1:25 PM.

D) Put together the results of the subqueries by using a UNION operation. Make sure you have union compatible results to demonstrate this case



CASE 4: Search for each product with at least quantity N (you choose what N is)

A) GLOBAL QUERY

'SELECT product_name FROM product_db WHERE product_quantity > 2'; (global query)

```

30  /
31  DECLARE
32  QUERYZ VARCHAR2 (400) := 'SELECT product_name FROM product_db WHERE product_quantity > 2';
33  TOKENS VARCHAR(300);
34  BEGIN
35  FOR TOKEN IN (SELECT REGEXP_SUBSTR(QUERYZ,'[^ ,]+',1,LEVEL) TEXTS FROM DUAL
36  CONNECT BY REGEXP_SUBSTR(QUERYZ,' ',1,LEVEL-1) IS NOT NULL)
37  LOOP
38  TOKENS := TOKEN.TEXTS;
39  INSERT INTO MY_TEMP_TABLE (TOKEN) VALUES (TOKENS);
40  DBMS_OUTPUT.PUT_LINE(TOKENS);
41  END LOOP;
42  END;
43  /
44

```

Tokenizer output:

```
Table METADATA_LAYER_TEMP created.
```

```
SELECT
product_name
FROM
product_db
WHERE
product_quantity
>
2
```

```
PL/SQL procedure successfully completed.
```

```
4 rows updated.
```

b) OUTPUT: FROM ALL LOCAL DBS 1,2,3,4 RESPONSES

```
Table RESULTS_TABLE1 created.
```

```
SELECT product_db2.p_name FROM product_db2 WHERE product_db2.p_quantity > 2
1 , java
2 , snickers
SELECT product_db3.name FROM product_db3 WHERE product_db3.quantity > 2
1 , keyboard
2 , mouse
3 , chap stick
SELECT null FROM null WHERE null > 2
NO TABLE OR RELEVANT COLUMN
SELECT null FROM null WHERE null > 2
NO TABLE OR RELEVANT COLUMN
1 , keyboard
2 , mouse
3 , chap stick
```

```
PL/SQL procedure successfully completed.
```

C) PARTIAL RESULTS:

Temporary table 1:

The screenshot shows the Oracle SQL Developer interface. In the central workspace, there is a 'Worksheet' tab titled 'Query Builder'. The code in the worksheet is:

```
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
SELECT * FROM RESULTS_TEMP;
```

Below the worksheet, there is a 'Script Output' tab showing the results of the query:

NAME
1 java
2 aniseers

The status bar at the bottom right indicates the time as 142 PM and the date as 12/2/2020.

Temporary table 2:

The screenshot shows the Oracle SQL Developer interface. In the central workspace, there is a 'Worksheet' tab titled 'Query Builder'. The code in the worksheet is:

```
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
SELECT * FROM RESULTS_TEMP;
```

Below the worksheet, there is a 'Script Output' tab showing the results of the query:

NAME
1 keyboard
2 mouse
3 chap stick

The status bar at the bottom right indicates the time as 142 PM and the date as 12/2/2020.

Temporary table 3:

The screenshot shows the Oracle SQL Developer interface. The top menu bar includes File, Edit, View, Navigate, Run Source, Team, Tools, Window, and Help. The left sidebar displays the 'Connections' tree, which is currently expanded to show the 'IS722_TEAMS' connection, listing various database objects like Tables, Views, Procedures, Functions, Operators, Triggers, Types, Materialized Views, Synonyms, Public Synonyms, Global Synonyms, Public Database Links, Directories, Editors, and Application Express. Below the connections tree is the 'Reports' section, which lists Analytics View Reports, Data Dictionary Reports, Data Modeler Reports, OLAP Reports, Performance Reports, and User Defined Reports. The main workspace contains a 'Worksheet' tab and a 'Query Builder' tab. A script editor window is open, containing the following SQL code:

```
261: SELECT * FROM RESULTS_TEMP ;
262:
263: SELECT * FROM RESULTS_TEMP1;
264:
265: SELECT * FROM RESULTS_TEMP2;
266:
267: SELECT * FROM RESULTS_TEMP3;
268:
269: 
```

Below the script editor is a toolbar with icons for Script Output, Query Result, Query Result 1, Query Result 2, Query Result 3, and Query Result 4. The 'Query Result 1' tab is active, showing the output: COL1. The status bar at the bottom indicates 'Saved: IS722_TEAMS (Unshared) _3' and shows system information: Line 266 Column 1, Insert, Modified, Windows 10, 1:42 PM, 12/2/2020.

Temporary table 4:

The screenshot shows the Oracle SQL Developer interface. The title bar reads "Oracle SQL Developer : IS722_TEAM3 (Unshared) _2". The left sidebar displays the "Connections" tree, which includes "IS722_TEAM3" and "IS722_TEAM3 (Unshared) _2". The "Reports" section is also visible. The main workspace contains a "Worksheet" tab with the following SQL code:

```
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270

SELECT * FROM RESULTS_TEMP ;
SELECT * FROM RESULTS_TEMP1;
SELECT * FROM RESULTS_TEMP2;
SELECT * FROM RESULTS_TEMP3;
```

The "Script Output" tab shows the results of the last query: "All Rows Fetched: 0 in 0.023 seconds". The bottom status bar indicates "Line 268 Column 1".

D) CONSOLIDATED QUERY:

Put together the results of the subqueries by using a UNION operation. Make sure you have union compatible results to demonstrate this case

CASE 5: Display all orders of a particular customer

A) GLOBAL QUERY

```
'SELECT purchase_id FROM purchases_db WHERE purchase_customer_id = "47931"; (global query)
```

```
50);
51 DECLARE
52   QUERYZ VARCHAR2 (400) := 'SELECT purchase_id FROM purchases_db WHERE purchase_customer_id = ''47931'''';
53   TOKENS VARCHAR(300);
54 BEGIN
55   FOR TOKEN IN (SELECT REGEXP_SUBSTR(QUERYZ, '[^ ,]+',1,LEVEL) TEXTS FROM DUAL
56   CONNECT BY REGEXP_SUBSTR(QUERYZ, ' ',1,LEVEL-1) IS NOT NULL)
57   LOOP
58     TOKENS := TOKEN.TEXTS;
59     INSERT INTO MY_TEMP_TABLE (TOKEN) VALUES(TOKENS);
60     DBMS_OUTPUT.PUT_LINE(TOKENS);
61   END LOOP;
62 END;
63 /
64 UPDATE MY_TEMP_TABLE
```

Tokenizer output:

```

Table METADATA_LAYER_TEMP created.

SELECT
purchase_id
FROM
purchases_db
WHERE
purchase_customer_id
=
'47931'

PL/SQL procedure successfully completed.

4 rows updated.

```

b) SUBQUERIES OUTPUT: FROM ALL LOCAL DBS 1,2,3,4 RESPONSES

```

Table RESULTS_TABLE1 dropped.

Table RESULTS_TABLE1 created.

SELECT purchases_db1.purchase_id FROM purchases_db1 WHERE purchases_db1.customer_id = '47931'
1 , 8482620
SELECT orders_db2.o_id FROM orders_db2 WHERE null = '47931'
SELECT order_db3.order_id FROM order_db3 WHERE order_db3.customer = '47931'
SELECT purchases_db2.purchase_id FROM purchases_db2 WHERE purchases_db2.cust_id = '47931'

PL/SQL procedure successfully completed.

>>Query Run In:Query Result
>>Query Run In:Query Result 1
>>Query Run In:Query Result 2
>>Query Run In:Query Result 3
>>Query Run In:Query Result 4

```

C) PARTIAL RESULTS:

Temporary table1:

The screenshot shows the Oracle SQL Developer interface. The left sidebar displays the schema structure for 'IS722_TEAM3' with various objects like Tables, Views, Procedures, Functions, Triggers, Types, Synonyms, and Directories. The main workspace shows a query builder window with the following code:

```
SELECT * FROM RESULTS_TMRP ;
```

The results pane shows one row of data from the 'PURCHASE_ID' table:

PURCHASE_ID
6402420

At the bottom, the status bar indicates 'Saved: IS722_TEAM3 (Unshared) _2'. The system tray shows icons for network, battery, and system status.

Temporary table 2:

The screenshot shows the Oracle SQL Developer interface. The top menu bar includes File, Edit, View, Navigate, Run, Source, Team, Tools, Window, Help, and a connection dropdown for 'IS722_TEAM3 (Unshared) _4'. The left sidebar contains sections for Connections, Oracle Connectors, Reports, and Application Express. The main workspace has tabs for 'IS722_PK93614-1.ed', 'Welcome Page', 'IS722_TEAM3', 'case 1.sql', 'case 2.sql', 'case 3.sql', 'case 4.sql', and 'IS722_TEAM3 (Unshared) _4'. The current tab is 'IS722_TEAM3 (Unshared) _4'. The central area shows a 'Worksheet' tab with a query builder. A code editor window displays the following SQL:

```
242:  SELECT * FROM RESULTS_TEMP ;
243: 
244:  SELECT * FROM RESULTS_TEMP;
```

Below the code editor is a 'Script Output' tab showing the results of the executed queries. The results table has one row with the column 'O_ID' containing the value '1'. The status bar at the bottom indicates 'Line 263 Column 1' and 'Wednesday, December 2, 2020'.

Temporary table 3:

```

249
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270

```

```

SELECT * FROM RESULTS_TEMP ;
SELECT * FROM RESULTS_TEMP1;
SELECT * FROM RESULTS_TEMP1;
SELECT * FROM RESULTS_TEMP2;
SELECT * FROM RESULTS_TEMP3;

```

Script Output | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 | All Rows Fetched: 0 in 0.028 seconds

SQL ORDER_ID

Line 266 Column 1 Insert Modified Windows 12/2/2020

Temporary table 4:

```

249
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270

```

```

SELECT * FROM RESULTS_TEMP ;
SELECT * FROM RESULTS_TEMP1;
SELECT * FROM RESULTS_TEMP1;
SELECT * FROM RESULTS_TEMP2;
SELECT * FROM RESULTS_TEMP3;

```

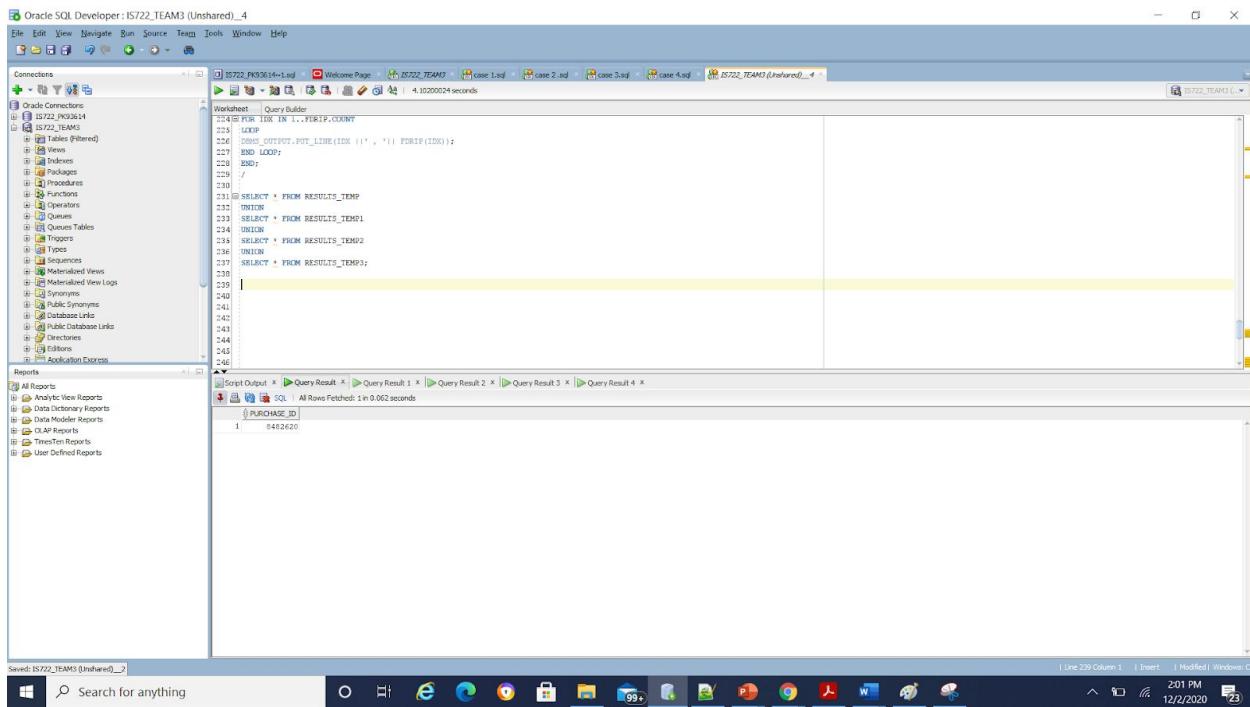
Script Output | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 | All Rows Fetched: 0 in 0.074 seconds

SQL P2_PURCHASE_ID

Line 269 Column 1 Insert Modified Windows 12/2/2020

D) CONSOLIDATED QUERY: OVERALL RESULTS:

Put together the results of the subqueries by using a UNION operation. Make sure you have union compatible results to demonstrate this case



CASE 6: Display all orders of a particular customer

A) GLOBAL QUERY

```
'SELECT customer_first_name, street_address FROM customers_db WHERE city =
"Columbia"; ( global query)
```

```

29 db4_function_name varchar2(100)
30 );
31 DECLARE
32 QUERYZ VARCHAR2 (400) := 'SELECT customer_first_name, street_address FROM customers_db WHERE city = ''Columbia''';
33 TOKENS VARCHAR(300);
34 BEGIN
35 FOR TOKEN IN (SELECT REGEXP_SUBSTR(QUERYZ,'[^ ]+',1,LEVEL) TEXTS FROM DUAL
36 CONNECT BY REGEXP_SUBSTR(QUERYZ, ' ',1,LEVEL-1) IS NOT NULL)
37 LOOP
38 TOKENS := TOKEN.TEXTS;
39 INSERT INTO MY_TEMP_TABLE (TOKEN) VALUES(TOKENS);
40 DBMS_OUTPUT.PUT_LINE(TOKENS);
41 END LOOP;
42 END;
43 /
44

```

Tokenizer output:

```
Table METADATA_LAYER_TEMP dropped.

---

  
Table METADATA_LAYER_TEMP created.  
  
SELECT  
customer_first_name  
street_address  
FROM  
customers_db  
WHERE  
city  
=  
'Columbia'  
  
PL/SQL procedure successfully completed.  
  
4 rows updated.
```

B) SUBQUERIES OUTPUT: FROM ALL LOCAL DBS 1,2,3,4 RESPONSES

```
Table RESULTS_TABLE1 dropped.

---

  
Table RESULTS_TABLE1 created.  
  
SELECT customers_db1.first_name,customers_db1.street_address FROM customers_db1 WHERE customers_db1.city='Columbia'  
1 , dj , Big Drip Avenue  
SELECT customers_db2.cf_name,customers_db2.c_address FROM customers_db2 WHERE customers_db2.c_city='Columbia'  
1 , Krishna , 8701 Hayshed Lane  
SELECT customers_3.f_name,customers_3.street_address FROM customers_3 WHERE customers_3.city='Columbia'  
SELECT customers_db4.cc_name,customers_db4.cc_street_address FROM customers_db4 WHERE customers_db4.cc_city='Columbia'  
1 , DK Metcalf , Big Hawk Lane  
  
PL/SQL procedure successfully completed.  
>>Query Run In:Query Result  
>>Query Run In:Query Result 1  
>>Query Run In:Query Result 2  
>>Query Run In:Query Result 3  
>>Query Run In:Query Result 4
```

C) PARTIAL RESULTS:

Temporary table 1:

Oracle SQL Developer : IS722_TEAM3 (Unshared) ... 5

File Edit View Navigate Run Source Team Tools Window Help

Connectors

- IS722_TEAM3
- IS722_TEAM3 (Filtered)
- Views
- Indexes
- Packages
- Procedures
- Functions
- Triggers
- Queues
- Queues Tables
- Triggers
- Types
- Sequences
- Materialized Views
- Materialized View Logs
- Synonyms
- Public Synonyms
- Database Links
- Public Database Links
- Directories

Reports

- All Reports
- Analytic View Reports
- Data Dictionary Reports
- Data Modeler Reports
- OLAP Reports
- TimeTen Reports
- User Defined Reports

case 1.sql

IS722_TEAM3 (Unshared) ... 5

case 1.sql

Search for anything

227 PM 12/2/2020

Worksheet Query Builder

```

261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280

```

```

SELECT * FROM RESULTS_TEMP;

SELECT * FROM RESULTS_TEMP1;

SELECT * FROM RESULTS_TEMP2;

SELECT * FROM RESULTS_TEMP3;

```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4

All SQL All Rows Fetched: 1 in 0.024 seconds

FIRST_NAME	STREET_ADDRESS
Big Trip Avenue	

case 1.sql

IS722_TEAM3 (Unshared) ... 5

case 1.sql

Search for anything

227 PM 12/2/2020

Temporary table 2:

Oracle SQL Developer : IS722_TEAM3 (Unshared) ... 5

File Edit View Navigate Run Source Team Tools Window Help

Connectors

- IS722_TEAM3
- IS722_TEAM3 (Filtered)
- Views
- Indexes
- Packages
- Procedures
- Functions
- Triggers
- Queues
- Queues Tables
- Triggers
- Types
- Sequences
- Materialized Views
- Materialized View Logs
- Synonyms
- Public Synonyms
- Database Links
- Public Database Links
- Directories

Reports

- All Reports
- Analytic View Reports
- Data Dictionary Reports
- Data Modeler Reports
- OLAP Reports
- TimeTen Reports
- User Defined Reports

case 1.sql

IS722_TEAM3 (Unshared) ... 5

case 1.sql

Search for anything

227 PM 12/2/2020

Worksheet Query Builder

```

261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280

```

```

SELECT * FROM RESULTS_TEMP;

SELECT * FROM RESULTS_TEMP1;

SELECT * FROM RESULTS_TEMP2;

SELECT * FROM RESULTS_TEMP3;

```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4

All SQL All Rows Fetched: 1 in 0.058 seconds

CF_NAME	C_ADDRESS
Krishna	8701 Baysted Lane

case 1.sql

IS722_TEAM3 (Unshared) ... 5

case 1.sql

Search for anything

227 PM 12/2/2020

Temporary table 3:

The screenshot shows the Oracle SQL Developer interface with several windows open. The main window displays a query builder with the following SQL code:

```

241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280

```

The script output window shows the results of the queries:

```

SELECT * FROM RESULTS_TEMP;
SELECT * FROM RESULTS_TEMP1;
SELECT * FROM RESULTS_TEMP2;
SELECT * FROM RESULTS_TEMP3;

```

The results pane shows the following data:

F_NAME	STREET
John	123 Main Street

The status bar at the bottom indicates "1 Line 276 Column 1 | Insert | Modified | Windows | 227 PM 12/2/2020".

Temporary table 4:

The screenshot shows the Oracle SQL Developer interface with several windows open. The main window displays a query builder with the following SQL code:

```

241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280

```

The script output window shows the results of the queries:

```

SELECT * FROM RESULTS_TEMP ;
SELECT * FROM RESULTS_TEMP1;
SELECT * FROM RESULTS_TEMP2;
SELECT * FROM RESULTS_TEMP3;

```

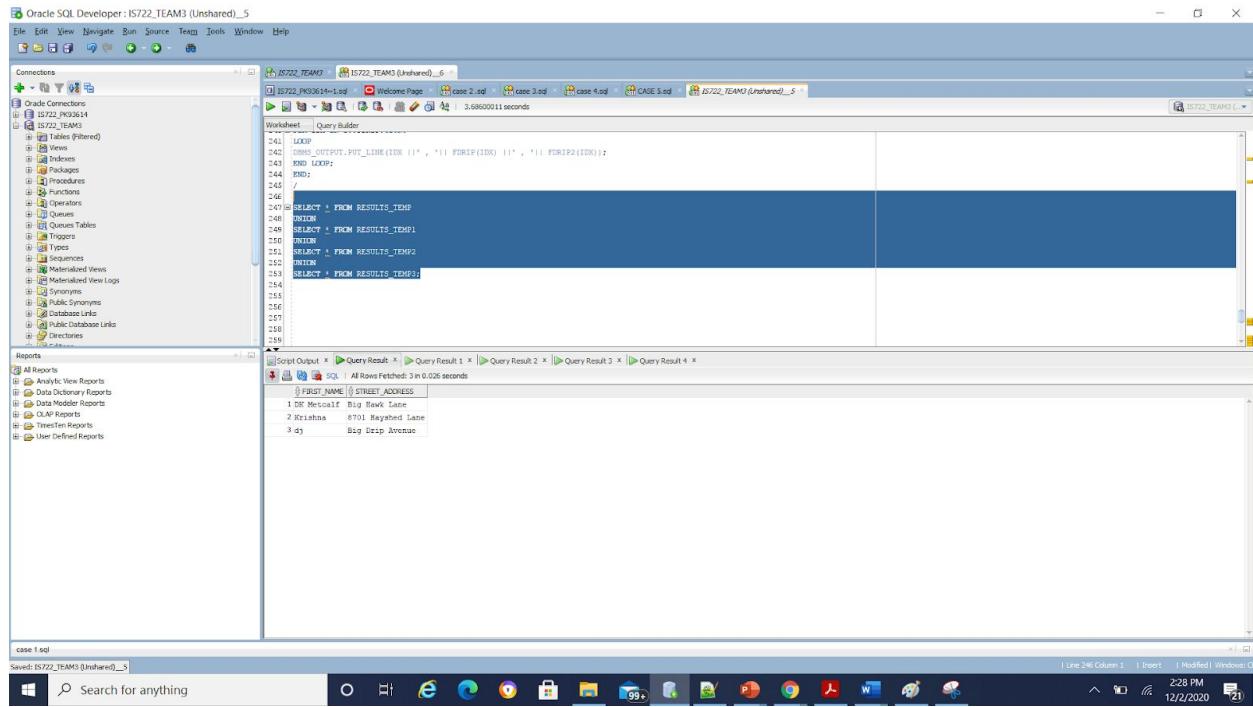
The results pane shows the following data:

CC_NAME	CC_STREET_ADDRESS
John	123 Main Street

The status bar at the bottom indicates "1 Line 260 Column 1 | Insert | Modified | Windows | 228 PM 12/2/2020".

D) CONSOLIDATED QUERY: OVERALL RESULTS:

Put together the results of the subqueries by using a UNION operation. Make sure you have union compatible results to demonstrate this case



OWN SCENARIOS CREATED: EXTRA SHOW HOW GOOD OUR PRODUCT IS:

CASE 7: Display all titles of a particular artist where search string for artists starts with I letter :

A) GLOBAL QUERY

'SELECT cds_title FROM cds_db WHERE artists LIKE "%I%"; (global query)

```

30 );
31 DECLARE
32   QUERYZ VARCHAR2 (400) := 'SELECT cds_title FROM cds_db WHERE artists LIKE ''I%''';
33   TOKENS VARCHAR(300);
34 BEGIN
35   FOR TOKEN IN (SELECT REGEXP_SUBSTR(QUERYZ,'[^ ,]+',1,LEVEL) TEXTS FROM DUAL
36   CONNECT BY REGEXP_SUBSTR(QUERYZ,' ',1,LEVEL-1) IS NOT NULL)
37   LOOP
38     TOKENS := TOKEN.TEXTS;
39     INSERT INTO MY_TEMP_TABLE (TOKEN) VALUES(TOKENS);
40     DBMS_OUTPUT.PUT_LINE(TOKENS);
41   END LOOP;
42 END;
43 /
44
45 UPDATE MY_TEMP_TABLE

```

Tokenizer output:

```
Table METADATA_LAYER_TEMP dropped.

Table METADATA_LAYER_TEMP created.

SELECT
cds_title
FROM
cds_db
WHERE
artists
LIKE
'1%'

PL/SQL procedure successfully completed.

3 rows updated.
```

B) SUBQUERIES OUTPUT: FROM ALL LOCAL DBS 1,2,3,4 RESPONSES

```
Table RESULTS_TABLE1 created.

SELECT cds_db1.title FROM cds_db1 WHERE cds_db1.artist LIKE '1%'
1 , harder than ever
2 , my turn
SELECT null FROM null WHERE null LIKE '1%'
NO TABLE OR RELEVANT COLUMN
SELECT null FROM null WHERE null LIKE '1%'
NO TABLE OR RELEVANT COLUMN
SELECT music_cds_db2.mcd2_title FROM music_cds_db2 WHERE music_cds_db2.mcd2_artists LIKE '1%'
1 , too hard
2 , drip harder

PL/SQL procedure successfully completed.

>>Query Run In:Query Result 2
--Query Run In:Query Default 2
```

C) PARTIAL RESULTS:

Temporary table1:

Oracle SQL Developer : IS722_TEAM3 (Unshared) _6

```

236
240
241
243
244
245
246
247
248
249
250 SELECT * FROM RESULTS_TEMP ;
251
252 SELECT * FROM RESULTS_TEMP1;
253
254 SELECT * FROM RESULTS_TEMP2;
255
256
257 SELECT * FROM RESULTS_TEMP3;
258
259

```

Script Output | All Rows Parsed: 2 in 0.062 seconds

TIME
1 harder than ever
2 my turn

case 1.sql

case 2.sql case 3.sql case 4.sql CASE 5.sql CASE 6.sql

Line 250 Column 3 Insert Windows

Temporary table 2:

Oracle SQL Developer : IS722_TEAM3 (Unshared) _6

```

239
240
241
242
243
244
245
246
247
248
249
250 SELECT * FROM RESULTS_TEMP ;
251
252 SELECT * FROM RESULTS_TEMP1;
253
254 SELECT * FROM RESULTS_TEMP2;
255
256
257 SELECT * FROM RESULTS_TEMP3;
258
259

```

Script Output | All Rows Parsed: 0 in 0.025 seconds

COL1

case 1.sql

case 2.sql case 3.sql case 4.sql CASE 5.sql CASE 6.sql

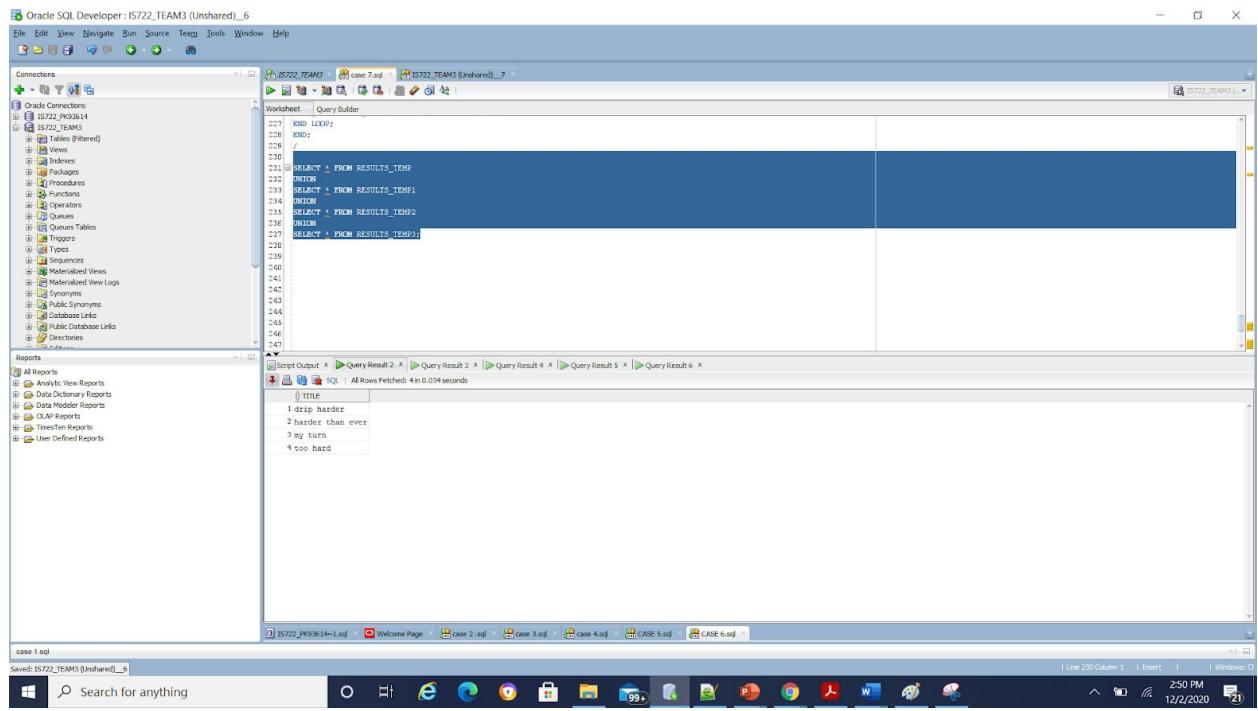
Line 252 Column 3 Insert Windows

Temporary table 3:

Temporary table 4:

D) CONSOLIDATED QUERY: OVERALL RESULTS:

Put together the results of the subqueries by using a UNION operation. Make sure you have union compatible results to demonstrate this case



CASE 8: Display all titles, price of a particular artist:

A) GLOBAL QUERY

'SELECT cds_title, cds_price FROM cds_db WHERE artists = "lil_baby"'; (global query)

```

29  dbms_function_name_varchar2(iuu)
30  );
31  DECLARE
32  QUERYZ VARCHAR2 (400) := 'SELECT cds_title, cds_price FROM cds_db WHERE artists = ''lil_baby''';
33  TOKENS VARCHAR(300);
34  BEGIN
35  FOR TOKEN IN (SELECT REGEXP_SUBSTR(QUERYZ,[^ ,]+',1,LEVEL) TEXTS FROM DUAL
36  CONNECT BY REGEXP_SUBSTR(QUERYZ,' ',1,LEVEL-1) IS NOT NULL)
37  LOOP
38  TOKENS := TOKEN.TEXTS;
39  INSERT INTO MY_TEMP_TABLE (TOKEN) VALUES(TOKENS);
40  DBMS_OUTPUT.PUT_LINE(TOKENS);
41  END LOOP;
42  END;
43  /
44
45  UPDATE MY_TEMP_TABLE

```

Tokenizer output:

```

Table METADATA_LAYER_TEMP created.

SELECT
cds_title
cds_price
FROM
cds_db
WHERE
artists
=
'lil_baby'

```

B) SUBQUERIES OUTPUT: FROM ALL LOCAL DBS 1,2,3,4 RESPONSES

The screenshot shows a database interface with a toolbar at the top and a main pane below. The main pane displays the results of a series of SQL queries. The queries include selecting from the 'cds_db' table where the artist is 'lil_baby' and performing joins between 'cds_db1', 'cds_db2', and 'music_cds_db2' tables. The results show various song titles and prices. The interface indicates the task was completed in 4.471 seconds.

```

Task completed in 4.471 seconds

SELECT cds_db1.title,CAST(cds_db1.price as varchar2(100)) AS PRICE FROM cds_db1 WHERE cds_db1.artist='lil_baby'
1 , harder than ever , 2.34
2 , my turn , 15.94
SELECT null,null FROM null WHERE null='lil_baby'
NO TABLE OR RELEVANT COLUMN
SELECT null,null FROM null WHERE null='lil_baby'
NO TABLE OR RELEVANT COLUMN
SELECT music_cds_db2.mcd2_title,music_cds_db2.mcd2_price FROM music_cds_db2 WHERE music_cds_db2.mcd2_artists='lil_baby'
1 , too hard , 3.4
2 , drip harder , 2.34

PL/SQL procedure successfully completed.

>>Query Run In:Query Result
>>Query Run In:Query Result 1
>>Query Run In:Query Result 2
>>Query Run In:Query Result 3
>>Query Run In:Query Result 4

```

C) PARTIAL RESULTS:

Temporary table 1:

Oracle SQL Developer: IS722_TEAM3 (Unshared) ... 7

File Edit View Navigate Run Source Team Tools Window Help

Connectors Reports

IS722_TEAM3 (Unshared) All Reports Data Dictionary Reports Data Modeler Reports DML Reports Event Ten Reports User Defined Reports

case 7.sql case 8.sql

Worksheet Query Builder

```

250 SELECT * FROM RESULTS_TEMP1
251 UNION
252 SELECT * FROM RESULTS_TEMP2
253 UNION
254 SELECT * FROM RESULTS_TEMP3;
255
256
257
258
259
260
261
262
263
264
265
266
267 SELECT * FROM RESULTS_TEMP1;
268
269 SELECT * FROM RESULTS_TEMP1;

```

Script Output X Query Result X Query Result 1 X Query Result 2 X Query Result 3 X Query Result 4 X

All Rows Petched: 2 in 0.021 seconds

TIME	PRICE
1 harder than ever	2.34
2 my turn	15.94

case 1.sql case 2.sql case 3.sql case 4.sql CASE 5.sql CASE 6.sql

Line 266 Column 3 Insert Windows 255 PM 12/2/2020

Temporary table 2:

Oracle SQL Developer: IS722_TEAM3 (Unshared) ... 7

File Edit View Navigate Run Source Team Tools Window Help

Connectors Reports

IS722_TEAM3 (Unshared) All Reports Data Dictionary Reports Data Modeler Reports DML Reports Event Ten Reports User Defined Reports

case 7.sql case 8.sql

Worksheet Query Builder

```

250 SELECT * FROM RESULTS_TEMP1
251 UNION
252 SELECT * FROM RESULTS_TEMP2
253 UNION
254 SELECT * FROM RESULTS_TEMP3;
255
256
257
258
259
260
261
262
263
264
265
266
267 SELECT * FROM RESULTS_TEMP1;
268
269 SELECT * FROM RESULTS_TEMP1;

```

Script Output X Query Result X Query Result 1 X Query Result 2 X Query Result 3 X Query Result 4 X

All Rows Petched: 0 in 0.02 seconds

COL1	COL2
------	------

case 1.sql case 2.sql case 3.sql case 4.sql CASE 5.sql CASE 6.sql

Line 269 Column 3 Insert Windows 255 PM 12/2/2020

Temporary table 3:

The screenshot shows the Oracle SQL Developer interface. The top menu bar includes File, Edit, View, Navigate, Run, Source, Team, Tools, Window, and Help. The left sidebar has sections for Connections (with IS722_TEAM3 selected), Reports (with All Reports selected), and Database Object Browser (showing tables, views, packages, procedures, functions, operators, types, triggers, and synonyms). The main workspace contains a 'Worksheet' tab with a 'Query Builder' interface. The code area contains the following SQL:

```
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267 SELECT * FROM RESULTS_TEMP ;
268
269 SELECT * FROM RESULTS_TEMP1;
270
271 SELECT * FROM RESULTS_TEMP2;
272
273
274 SELECT * FROM RESULTS_TEMP3;
```

Below the code, the 'Script Output' tab shows 'All Rows Parsed: 0 in 0.024 seconds'. The bottom navigation bar includes tabs for case 1.sql, case 2.sql, case 3.sql, case 4.sql, case 5.sql, and CASE 6.sql. The bottom right corner shows status information: Line 273 Column 1, Insert, and Windows: 0. The taskbar at the bottom features the Start button, a search bar, and icons for various applications like File Explorer, Edge, and Google Chrome.

Temporary table 4:

The screenshot shows the Oracle SQL Developer interface. The top menu bar includes File, Edit, View, Navigate, Run, Source, Tools, Window, and Help. The left sidebar contains sections for Connections (with one entry for IS722_TEAM3), Reports (with various report types like All Reports, Analytic View Reports, Data Dictionary Reports, Data Modeler Reports, OLAP Reports, and TrendTen Reports), and User Defined Reports. The main workspace has tabs for case 7.sql and case 8.sql. The central area features a Worksheet / Query Builder with the following SQL code:

```
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275

  SELECT * FROM RESULTS_TEMP ;
  SELECT * FROM RESULTS_TEMP1;
  SELECT * FROM RESULTS_TEMP02;
  SELECT * FROM RESULTS_TEMP3;


```

The results pane shows the output of the last query:

MOD2_TYPE	MOD2_PRICE
1 too hard	3.1
2 drip harder	2.34

The bottom navigation bar includes tabs for IS722_P953814n-1.sql, Welcome Page, case 2.sql, case 3.sql, case 4.sql, CASE 5.sql, and CASE 6.sql. The status bar at the bottom right shows Line 273 Column 1, Insert, and Windows: 21. The taskbar at the very bottom displays icons for File Explorer, Task View, Internet Explorer, Edge, File History, 99+, Photos, OneDrive, File Explorer, Power, Task View, Google Chrome, and Microsoft Edge.

D) CONSOLIDATED QUERY: OVERALL RESULTS:

Put together the results of the subqueries by using a UNION operation. Make sure you have union compatible results to demonstrate this case

