

FSW-140 Assignment: White Christmas
WEEK 6
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Query-1: Show the average daily temperature for August 10th, 1964.

The screenshot displays the SQL Developer environment. In the left-hand 'Navigator' pane, the 'SCHEMAS' section is expanded, and the 'whitechristmasdata' schema is selected. The main workspace shows a SQL file with the following content:

```

1  -- Query-1: Show the average daily temperature for August 10th, 1964.
2
3  -- a) Query:
4  • SELECT m8/10 from whitechristmasdata
5  where yr = 1964 and dy = 10;
6  -- b) Columns: 1
7  -- c) Expected Row Count: 1
8
9

```

Below the editor, the 'Result Grid' is visible, showing the results of the query:

Result Grid
m8/10
13.9000

At the bottom, the 'Output' pane shows the 'Action Output' for the query execution:

#	Time	Action	Message
10	19:33:17	use 'whitechristmasdata'	0 row(s) affected
11	19:34:40	SELECT m8/10 from whitechristmasdata where yr = 1964 and dy = 10	1 row(s) returned
12	19:35:50	SELECT m8/10 from whitechristmasdata where yr = 1964 and dy = 10	1 row(s) returned

Query-2: Show the twelve temperatures.

The screenshot shows a SQL IDE interface with a menu bar (File, Edit, View, Query, Database, Server, Tools, Scripting, Help) and a toolbar. The Navigator pane on the left displays a tree of schemas, with 'whitechristmasdata' selected. The main editor shows a SQL query file with the following content:

```
1  -- Query-2: Show the twelve temperatures.
2
3  -- a) Query:
4  • SELECT yr-1811 as age, m12/10
5    FROM whitechristmasdata WHERE yr
6    BETWEEN 1812 and 1812+11 AND dy=25;
7
8  -- b) Columns: 2
9
10 -- c) Expected Row Count: 12
11
12
```

Below the editor, the 'Result Grid' tab is active, displaying the query results in a table with two columns: 'age' and 'm12/10'.

	age	m12/10
1	0.0000	
2	8.1000	
3	1.1000	
4	-0.8000	
5	3.0000	
6	-0.4000	
7	1.0000	
8	-0.8000	
9	-0.3000	
10	3.5000	

The 'Output' pane at the bottom shows the execution log with three entries:

#	Time	Action	Message
✓ 11	19:34:40	SELECT m8/10 from whitechristmasdata where yr = 1964 and dy = 10	1 row(s) returned
✓ 12	19:35:50	SELECT m8/10 from whitechristmasdata where yr = 1964 and dy = 10	1 row(s) returned
✓ 13	19:39:59	SELECT yr-1811 as age, m12/10 FROM whitechristmasdata WHERE yr BETWEEN 1812 and 18...	12 row(s) returned

Query-3: For each age 1-12 show which years were a White Christmas. Show 'White Christmas' or 'No snow' for each age.

The screenshot shows a SQL IDE interface with a Navigator on the left, a central query editor, and a bottom section for results and output.

Navigator: The left sidebar shows a tree of schemas. The 'whitechristmasdata' schema is expanded, showing 'Tables', 'Views', 'Stored Procedures', and 'Functions'. The 'world' schema is also visible.

SQL File 5* x: The central editor contains the following SQL query:

```
-- Query-3: For each age 1-12 show which years were a White Christmas. Show
-- 'White Christmas' or 'No snow' for each age.

-- a) Query:
SELECT yr-1811 AS age,
CASE WHEN min(m12) / 10 < 0 THEN 'white christmas' ELSE 'no snow' END FROM whitechristmasdata
WHERE yr BETWEEN 1812 AND 1812+11 AND dy BETWEEN 21 and 25
GROUP BY age;

-- b) Columns: 2

-- c) Expected Row Count: 12
```

Result Grid: Below the query editor, the 'Result Grid' tab is active. It displays the query results in a table with two columns: 'age' and 'CASE WHEN min(m12) / 10 < 0 THEN 'white christmas' ELSE 'no snow' END'. The results are as follows:

	age	CASE WHEN min(m12) / 10 < 0 THEN 'white christmas' ELSE 'no snow' END
1	no snow	
2	no snow	
3	white christmas	
4	white christmas	
5	white christmas	
6	white christmas	
7	white christmas	
8	white christmas	
9	white christmas	

Result 6 x: The bottom section shows the 'Output' tab with 'Action Output' selected. It displays a log of actions and their results:

#	Time	Action	Message
✓ 14	19:44:40	SELECT yr-1811 as age, CASE WHEN MIN(m12)<0 THEN 'white' END wc FROM whitechristmas...	12 row(s) returned
✓ 15	19:45:48	SELECT yr-1811 as age, CASE WHEN MIN(m12)<0 THEN 'white christmas' END wc FROM white...	12 row(s) returned
✓ 16	19:47:59	SELECT yr-1811 AS age, CASE WHEN min(m12) / 10 < 0 THEN 'white christmas' ELSE 'no snow' ...	12 row(s) returned

Query-4: List all the years and the wcc for children born in each year of the data set. Only show years where the wcc was at least 7.

The screenshot shows a SQL IDE interface with a menu bar (File, Edit, View, Query, Database, Server, Tools, Scripting, Help) and a toolbar. The left sidebar contains a 'Navigator' pane with a 'SCHEMAS' section. Under 'whitechristmasdata', the 'Tables' folder is expanded, showing a list of tables including 'whitechristmasdata'. The main editor pane, titled 'SQL File 5*', contains the following SQL query:

```
1  -- Query-4: List all the years and the wcc for children born in each year of
2  -- the data set. Only show years where the wcc was at least 7.
3
4  -- a) Query:
5  • SELECT yob, count(wc) FROM (SELECT yob, yr+1-yob AS age, CASE WHEN min(m12) <= 0 THEN 'white christmas' END wc
6  FROM whitechristmasdata CROSS JOIN (SELECT DISTINCT yr AS yob FROM whitechristmasdata) y
7  WHERE yr BETWEEN yob+2 AND yob+11 AND dy BETWEEN 21 AND 25 GROUP BY yob, age) x
8  GROUP BY yob HAVING count(wc) >= 7;
9
10 -- b) Columns: 2
11
12 -- c) Expected Row Count: 9
13
14
```

Below the editor, the 'Result Grid' tab is active, displaying the query results in a table:

	yob	count(wc)
▶	1805	7
	1806	7
	1807	7
	1808	8
	1809	9
	1810	8

The 'Output' pane at the bottom shows the execution log with three entries:

#	Time	Action	Message
✓ 15	19:45:48	SELECT yr-1811 as age, CASE WHEN MIN(m12)<0 THEN 'white christmas' END wc FROM white...	12 row(s) returned
✓ 16	19:47:59	SELECT yr-1811 AS age, CASE WHEN min(m12) / 10 < 0 THEN 'white christmas' ELSE 'no snow' ...	12 row(s) returned
✓ 17	19:54:15	SELECT yob, count(wc) FROM (SELECT yob, yr+1-yob AS age, CASE WHEN min(m12) <= 0 THE...	9 row(s) returned

Query-5: Display the average temperatures for August by decade.

FileEditViewQueryDatabaseServerToolsScriptingHelp

SQL File 5*

Don't Limit

1-- Query-5: Display the average temperatures for August by decade.

2

3

4-- a) Query:

5•SELECT yr, AVG(m8) FROM whitechristmasdata WHERE yr MOD 10 = 0 GROUP BY yr;

6

7-- b) Columns: 2

8

9-- c) Expected Row Count: 25

10

11

AdministrationSchemas

Information

Schema: whitechristmasdata

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	yr	AVG(m8)
▶	1780	175.5484
	1790	155.7419
	1800	168.0645
	1810	146.0968
	1820	147.0968
	1830	137.0645

Result 8

Output

Action Output

#	Time	Action	Message
✓	16 19:47:59	SELECT yr-1811 AS age, CASE WHEN min(m12) / 10 < 0 THEN 'white christmas' ELSE 'no snow' ...	12 row(s) returned
✓	17 19:54:15	SELECT yob, count(wc) FROM (SELECT yob, yr+1-yob AS age, CASE WHEN min(m12) <= 0 THE...	9 row(s) returned
✓	18 19:57:22	SELECT yr,AVG(m8) FROM whitechristmasdata WHERE yr MOD 10 = 0 GROUP BY yr	25 row(s) returned