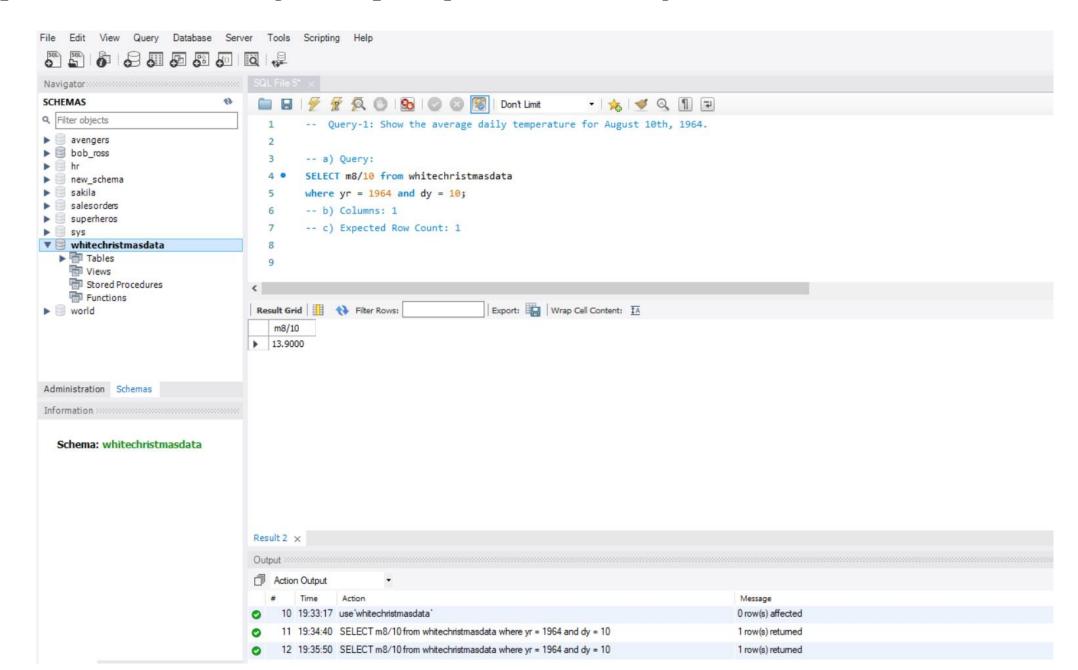# FSW-140 Assignment: White Christmas
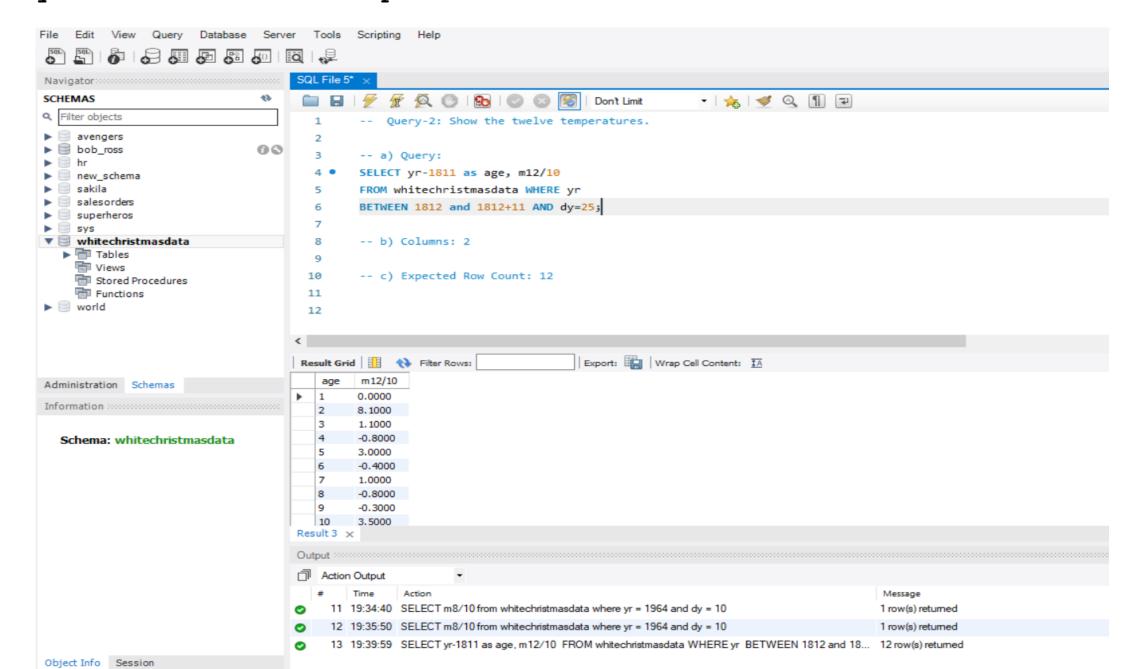## WEEK 6
RAFAEL FERNANDEZ

Query-1: Show the average daily temperature for August 10th, 1964.

Navigator

SCHEMAS

Q Filter objects

- ▶ 🗄 avengers
- ▶ 🗄 bob_ross
- ▶ 🗄 hr
- ▶ 🗄 new_schema
- ▶ 🗄 sakila
- ▶ 🗄 salesorders
- ▶ 🗄 superheros
- ▶ 🗄 sys
- ▼ 🗄 **whitechristmasdata**
  - ▶ 🗐 Tables
  - 🗐 Views
  - 🗐 Stored Procedures
  - 🗐 Functions
- ▶ 🗄 world

SQL File 5* ×

Don't Limit

```
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
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ‖A

m8/10
▶ 13.9000

Administration   Schemas

Information

Schema: **whitechristmasdata**

Result 2 ×

Output

🗗 Action Output ▾

#	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.


```
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
```

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

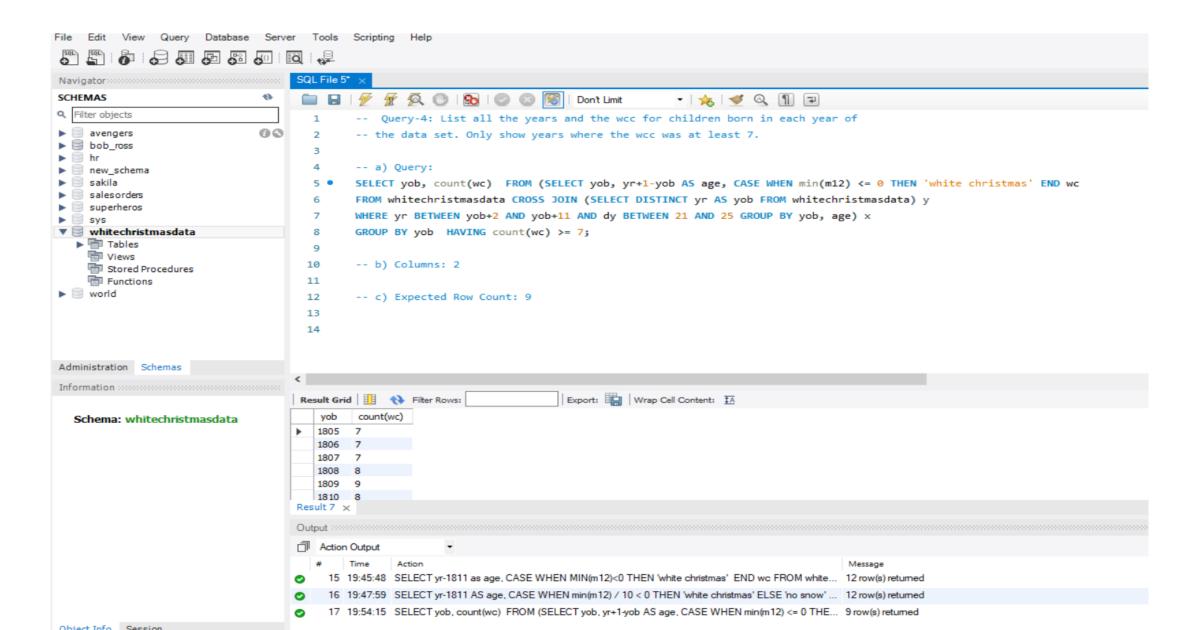| #	Time	Action	Message
11	19:34:40	SELECT m8/10 from whitechristmasdata where yr = 1964 and dy = 10	1 row(s) returned
12	19:35:50	SELECT m8/10 from whitechristmasdata where yr = 1964 and dy = 10	1 row(s) returned
13	19:39:59	SELECT yr-1811 as age, m12/10 FROM whitechristmasdata WHERE yr BETWEEN 1812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

```
1    --  Query-3: For each age 1-12 show which years were a White Christmas. Show
2    --  'White Christmas' or 'No snow' for each age.
3
4    -- a) Query:
5  • SELECT yr-1811 AS age,
6    CASE WHEN min(m12) / 10 < 0 THEN 'white christmas' ELSE 'no snow' END FROM whitechristmasdata
7    WHERE yr BETWEEN 1812 AND 1812+11 AND dy BETWEEN 21 and 25
8    GROUP BY age;
9
10
11   -- b) Columns: 2
12
13   -- c) Expected Row Count: 12
```

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 ×

Output

Action Output

#	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.

Navigator

SCHEMAS

Filter objects

▶ avengers
▶ bob_ross
▶ hr
▶ new_schema
▶ sakila
▶ salesorders
▶ superheros
▶ sys
▼ whitechristmasdata
  ▶ Tables
    Views
    Stored Procedures
    Functions
▶ world

Administration   Schemas

Information

Schema: **whitechristmasdata**

SQL File 5* ×

Don't Limit

```
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
```

Result Grid   Filter Rows: Export: Wrap Cell Content:

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

Result 7 ×

Output

Action Output

#	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.


```
 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
```

Schema: **whitechristmasdata**

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

Result 8

#	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