

BACH MARCELLO CONCERTO NO. 3 FOR OBOE AND STRINGS IN D MINOR

ADVANCED SQL 2ND JAN 2020 SAT

Climate Change: state_climate

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SELECT * FROM state_climate LIMIT 2;
SELECT state, year, tempc, AVG(tempc) OVER (PARTITION BY state ORDER BY year) AS 'running_avg_tempc'
FROM state_climate LIMIT 2; --T2
SELECT state, year, tempc, FIRST_VALUE (tempc) OVER (
    PARTITION BY state
    ORDER BY tempc) AS 'lowest_tempc' FROM state_climate LIMIT 3; -- T3
SELECT state, year, LAST_VALUE (tempc) OVER (
    PARTITION BY state
    ORDER BY tempc RANGE BETWEEN UNBOUNDED PRECEDING AND UNBOUNDED FOLLOWING) highest_tempc FROM state_climate LIMIT 3; -- T4
--SELECT state, year, tempc,
--tempc - LAG(tempc, 1, tempc) OVER (PARTITION BY state ORDER BY year) AS 'change_in_tempc'
--FROM state_climate
--ORDER BY change_in_tempc DESC; -- T5
SELECT RANK() OVER (ORDER BY tempc ) AS 'coldest_rank', state, year, tempc FROM state_climate LIMIT 3; -- T6
SELECT RANK() OVER (ORDER BY tempc DESC) AS 'warmest_rank', state, year, tempc FROM state_climate LIMIT 5; -- T7
SELECT NTILE(4) OVER (PARTITION BY state ORDER BY tempc ) AS 'quartile', state, year, tempc FROM state_climate LIMIT 5; -- T8
SELECT NTILE (5) OVER (ORDER BY tempc) AS 'quintiles', year, state, tempc
FROM state_climate LIMIT 5; -- T9
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state	year	tempf	tempc
Alabama	1895	61.64166667	16.46759259
Alabama	1896	64.26666667	17.92592593
state	year	tempc	running_avg_tempc
Alabama	1895	16.46759259	16.46759259
Alabama	1896	17.92592593	17.19675926
state	year	tempc	'lowest_tempc'
Alabama	1976	15.93055556	15.93055556
Alabama	1968	16.11111111	15.93055556

Alabama	1940	16.20833333	15.93055556
state	year	highest_tempc	
Alabama	1976	18.72685185	
Alabama	1968	18.72685185	
Alabama	1940	18.72685185	
'coldest_rank'	state	year	tempc
1	North Dakota	1950	1.611111111
2	North Dakota	1951	2.009259259
3	Minnesota	1917	2.041666667
warmest_rank	state	year	tempc
1	Florida	2015	22.97685185
2	Florida	2019	22.87962963
3	Florida	2017	22.68981481
4	Florida	1990	22.49537037
4	Florida	1998	22.49537037
quartile	state	year	tempc
1	Alabama	1976	15.93055556
1	Alabama	1968	16.11111111
1	Alabama	1940	16.20833333
1	Alabama	1983	16.21759259
1	Alabama	1958	16.23148148
quintiles	year	state	tempc
1	1950	North Dakota	1.611111111
1	1951	North Dakota	2.009259259
1	1917	Minnesota	2.041666667
1	1916	North Dakota	2.074074074
1	1917	North Dakota	2.175925926

Database Schema