

DBMS Assignment-1

Submitted By-

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1. SELECT result_time, nodeid FROM expt-table
WHERE light > 550;

2. SELECT AVG (light) FROM expt-table
WHERE
nodeid = 1

AND result_time >= '18:00:00'

AND result_time <= '21:00:00';

3. SELECT nodeid, AVG (light) FROM expt-table
WHERE
result_time >= '18:00:00'

AND result_time <= '21:00:00'

GROUP BY nodeid

HAVING MAX (voltage) <= 418;

4. SELECT hour(result_time) AS hour,
AVG (calib) AS temp

FROM expt-table, calib-temp

WHERE row=temp AND

nodeid=2 AND

hour(result_time) BETWEEN 18 AND 21

GROUP BY hour(result_time)

ORDER BY hour(result_time);

⑤ SELECT e1.result-time, e2.result-time, e1.nodeid,
e2.nodeid, e1.epoch, e2.epoch

FROM expt-table AS e1, expt-table AS e2

WHERE (ABS(e1.result-time - e2.result-time) > second(1))

AND e1.nodeid=1 AND e2.nodeid=2

AND e1.epoch=e2.epoch;

⑥ SELECT epoch FROM expt-table
GROUP BY epoch HAVING COUNT(*) < 3
ORDER BY epoch;

⑦ SELECT e2.nodeid, e2.epoch, (CASE WHEN
e1.temp is NULL THEN
(SELECT temp FROM expt-table
WHERE nodeid = e2.nodeid AND
epoch =
(SELECT max(epoch) FROM expt-table
WHERE epoch < e2.epoch AND
nodeid = e2.nodeid))
ELSE
e1.temp
END)

FROM expt-table AS e1 FULL OUTER JOIN

(SELECT nodeid, epoch FROM
(SELECT DISTINCT epoch FROM expt-table) AS t1,
(SELECT DISTINCT nodeid FROM expt-table) AS t2)

AS e2

ON (e2.nodeid = e1.nodeid and e2.epoch = e1.epoch)

ORDER BY e2.epoch, e2.nodeid;

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⑧ SELECT epoch-i AS missing-epochs
FROM expt-table, (SELECT 1 AS i UNION
                  SELECT 2 AS i UNION
                  SELECT 3 AS i UNION
                  SELECT 4 AS i ) AS t
WHERE epoch-i > (SELECT min(epoch) FROM expt-table)
EXCEPT
SELECT epoch FROM expt-table;
```

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