

mcq-db-25-mar-2023

Total points 12/25



Upskill India Jan 2023 Program.

0 of 0 points

I swear on my country (motherland), I swear on my mother tongue, I swear on my family, ^{*} that I will take this test sincerely and honestly.



(Icon created by kosonicon - Flaticon)

☒ I SWEAR.

Enter your registered email as per enrollment in Open Mentor portal or Naan Mudhalvan Portal ^{*}

aa

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✓ 15. Which of the following queries will create a table named 'customers' with columns 'id', 'name', and 'email'? 1/1

- ☒ A) CREATE TABLE customers (id INT, name VARCHAR(50), email VARCHAR(50)); ✓
- ☐ B) ALTER TABLE customers ADD COLUMN id INT, ADD COLUMN name VARCHAR(50), ADD COLUMN email VARCHAR(50);
- ☐ C) DROP TABLE customers;
- ☐ D) None of the above.

✗ 9. What happens when a transaction is set to READ COMMITTED isolation level in PostgreSQL? 0/1

- ☒ A) It can see changes made by other transactions before they are committed. ✗
- ☐ B) It cannot see changes made by other transactions until they are committed.
- ☐ C) It can see changes made by other transactions only if they are committed.
- ☐ D) None of the above.

Correct answer

- ☒ C) It can see changes made by other transactions only if they are committed.

✓ 13. Which of the following queries will return unique values for column 'name' from the table 'employees'? 1/1

- ☒ A) SELECT DISTINCT name FROM employees; ✓
- ☐ B) SELECT name FROM employees WHERE name <> "";
- ☐ C) None of the above.

✓ 16. Which of the following queries will create a foreign key constraint between the 'customer_id' column in the 'orders' table and the 'id' column in the 'customers' table? 1/1

- ☒ A) ALTER TABLE orders ADD CONSTRAINT fk_customer FOREIGN KEY (customer_id) REFERENCES customers(id); ✓
- ☐ B) ALTER TABLE customers ADD CONSTRAINT fk_customer FOREIGN KEY (id) REFERENCES orders(customer_id);
- ☐ C) ALTER TABLE orders ADD FOREIGN KEY (customer_id) REFERENCES customers(id);
- ☐ D) None of the above.

✗ 21. Which of the following clauses is used to filter rows before grouping them in a PostgreSQL query? 0/1

- ☒ a) GROUP BY ✗
- ☐ b) ORDER BY
- ☐ c) HAVING
- ☐ d) WHERE

Correct answer

- ☒ d) WHERE

✗ 1. Which command is used to begin a transaction in PostgreSQL?

0/1

☒ A) COMMIT

✗

☐ B) BEGIN

☐ C) ROLLBACK

☐ D) SAVEPOINT

Correct answer

☒ B) BEGIN

✗ 3. What happens if a transaction is not committed or rolled back?

0/1

☒ A) The changes made by the transaction are saved permanently.

✗

☐ B) The changes made by the transaction are lost.

☐ C) The changes made by the transaction are saved temporarily until the next transaction.

☐ D) None of the above.

Correct answer

☒ B) The changes made by the transaction are lost.

✗ 23. Which of the following statements is true about the order of clauses in a PostgreSQL query that uses GROUP BY with WHERE conditions?

0/1

- ☒ a) GROUP BY should come before WHERE. ✗
- ☐ b) WHERE should come before GROUP BY.
- ☐ c) HAVING should come before GROUP BY.
- ☐ d) ORDER BY should come before GROUP BY

Correct answer

- ☒ b) WHERE should come before GROUP BY.

✗ 24. Which of the following is a valid example of a PostgreSQL query that uses GROUP BY with WHERE conditions?

0/1

- ☒ a) SELECT name, age FROM users GROUP BY name WHERE age > 30; ✗
- ☐ b) SELECT name, age FROM users GROUP BY name HAVING age > 30;
- ☐ c) SELECT name, age FROM users WHERE age > 30 HAVING name;
- ☐ d) SELECT name, age FROM users WHERE age > 30 GROUP BY name;

Correct answer

- ☒ d) SELECT name, age FROM users WHERE age > 30 GROUP BY name;

✓ 8. Which command is used to set a savepoint in a transaction in PostgreSQL?

1/1

☒ A) SAVEPOINT;



☐ B) BEGIN;

☐ C) ROLLBACK;

☐ D) COMMIT;

✓ 12. Which command is used to set a timeout for a transaction in PostgreSQL?

1/1

☒ A) SET SESSION CHARACTERISTICS AS TRANSACTION TIMEOUT;



☐ B) BEGIN;

☐ C) ROLLBACK;

☐ D) COMMIT;

✓ 17. Which of the following queries will return the total number of orders for each customer, sorted by the number of orders in descending order?

1/1

☒ A) SELECT [c.name](#), COUNT([o.id](#)) AS num_orders FROM customers c JOIN orders o ON [c.id](#) = o.customer_id GROUP BY [c.id](#) ORDER BY num_orders DESC;



☐ B) SELECT [c.name](#), COUNT([o.id](#)) AS num_orders FROM customers c LEFT JOIN orders o ON [c.id](#) = o.customer_id ;

☐ C) None of the above.

✗ 18. Which of the following queries will return the names of customers who have placed at least one order?

0/1

- ☒ A) SELECT [c.name](#) FROM customers c JOIN orders o ON [c.id](#) = o.customer_id; ✗
- ☐ B) SELECT [c.name](#) FROM customers c LEFT JOIN orders o ON [c.id](#) = o.customer_id WHERE [o.id](#) IS NOT NULL;
- ☐ C) None of the above.

Correct answer

- ☒ B) SELECT [c.name](#) FROM customers c LEFT JOIN orders o ON [c.id](#) = o.customer_id WHERE [o.id](#) IS NOT NULL;

✓ 4. Which of the following is true about a deadlock in PostgreSQL?

1/1

- ☒ A) It occurs when two or more transactions are waiting for each other to release a resource. ✓
- ☐ B) It occurs when a transaction is waiting for a resource that is held by another transaction.
- ☐ C) It occurs when a transaction is waiting for a resource that is not available.
- ☐ D) None of the above.

✓ 20. Which of the following is a valid syntax for using the WITH clause in an UPDATE statement? 1/1

- ☒ a) WITH temp_table AS (SELECT * FROM table1) UPDATE table2 SET column1 = temp_table.column1 FROM temp_table; ✓
- ☐ b) UPDATE table2 column1 = temp_table.column1 FROM temp_table WITH temp_table AS (SELECT * FROM table1);
- ☐ c) UPDATE table2 WITH temp_table AS (SELECT * FROM table1) SET column1 = temp_table.column1 FROM temp_table;

✗ 2. Which command is used to end a transaction in PostgreSQL?

0/1

☒ A) BEGIN

✗

☐ B) ROLLBACK

☐ C) COMMIT

☐ D) SAVEPOINT

Correct answer

☒ C) COMMIT

✓ 10. Which command is used to release a savepoint in a transaction in PostgreSQL? 1/1

☒ A) ROLLBACK TO SAVEPOINT;

✓

☐ B) BEGIN;

☐ C) ROLLBACK;

☐ D) COMMIT;

✗ 5. Which command is used to see the currently running transactions in PostgreSQL? 0/1

- ☒ A) BEGIN; ✗
- ☐ B) ROLLBACK;
- ☐ C) COMMIT;
- ☐ D) SELECT * FROM pg_stat_activity;

Correct answer

- ☒ D) SELECT * FROM pg_stat_activity;

✗ 19. Which of the following statements is true about the UPDATE query with a WITH clause? 0/1

- ☒ A. It can update multiple tables at once ✗
- ☐ B. It requires a GROUP BY clause
- ☐ C. It can only update a single column at a time
- ☐ D. It can be used to update rows based on a subquery

Correct answer

- ☒ D. It can be used to update rows based on a subquery

✗ 11. What happens when a transaction is set to REPEATABLE READ isolation level in PostgreSQL? 0/1

- ☒ A) It can see changes made by other transactions before they are committed. ✗
- ☐ B) It cannot see changes made by other transactions until they are committed.
- ☐ C) It can see changes made by other transactions only if they are committed.
- ☐ D) None of the above.

Correct answer

- ☒ B) It cannot see changes made by other transactions until they are committed.

✗ 25. Which of the following constraints is used to enforce a relationship between two tables? 0/1

- ☒ a) CHECK constraint ✗
- ☐ c) UNIQUE constraint
- ☐ d) FOREIGN KEY constraint

Correct answer

- ☒ d) FOREIGN KEY constraint

✓ 7. What happens when a transaction is set to READ UNCOMMITTED isolation level in PostgreSQL? 1/1

- ☒ A) It can see changes made by other transactions before they are committed. ✓
- ☐ B) It cannot see changes made by other transactions until they are committed.
- ☐ C) It can see changes made by other transactions only if they are committed.
- ☐ D) None of the above.

✓ 14. What is the difference between the following two queries? 1/1

Query 1: `SELECT DISTINCT name, age FROM employees;`
Query 2: `SELECT DISTINCT ON (name) name, age FROM employees;`

- ☒ A) Query 1 selects all unique combinations of name and age, while Query 2 selects only the first row for each unique name. ✓
- ☐ B) Query 1 selects only unique names, while Query 2 selects all rows.
- ☐ C) There is no difference between them.
- ☐ D) None of the above.

✗ 22. In a PostgreSQL query, which clause can be used to filter groups based on aggregate function results?

0/1

☒ a) GROUP BY

✗

☐ b) ORDER BY

☐ c) HAVING

☐ d) WHERE

Correct answer

☒ c) HAVING

✓ 6. Which command is used to set the isolation level of a transaction in PostgreSQL? 1/1

☒ A) SET TRANSACTION ISOLATION LEVEL;

✓

☐ B) BEGIN;

☐ C) ROLLBACK;

☐ D) COMMIT;

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