## Indian Institute of Information Technology Surat

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# Lab Report on

# Advanced Database Management (CS 604) Practical

**Submitted by**

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## Lab No: 7

**Aim: To Implement basic relational methods and statements using PostgreSQL.**

**Description:**

1. Write a PSQL statement to create a simple table countries including columns country\_id,country\_name and region\_id.

2. Write a PSQL statement to create a simple table countries including columns country\_id,country\_name and region\_id which already exist.

3. Write a PSQL statement to create the structure of a table dup\_countries similar to countries.

4. Write a PSQL statement to create a duplicate copy of countries table including structure and data by name dup\_countries.

5. Write a PSQL statement to create a table countries set a constraint NULL.

6. Write a PSQL statement to create a table named jobs including columns job\_id, job\_title, min\_salary, max\_salary and check whether the max\_salary amount exceeding the upper limit 25000.

7. Write a PSQL statement to create a table named countries including columns country\_id, country\_name and region\_id and make sure that no countries except Italy, India and China will be entered in the table.

8. Write a PSQL statement to create a table named countries including columns country\_id,country\_name and region\_id and make sure that no duplicate data against column country\_id will be allowed at the time of insertion.

9. Write a PSQL statement to create a table named jobs including columns job\_id, job\_title, min\_salary and max\_salary, and make sure that, the default value for job\_title is blank and min\_salary is 8000 and max\_salary is NULL will be entered automatically at the time of insertion if no value assigned for the specified columns.

10. Write a PSQL statement to create a table named countries including columns country\_id, country\_name and region\_id and make sure that the country\_id column will be a key field which will not contain any duplicate data at the time of insertion.

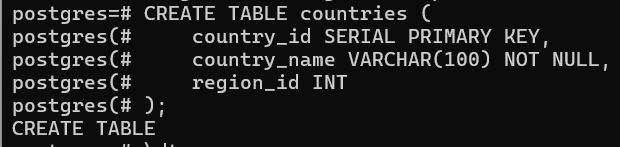
11. Write a PSQL statement to create a table countries including columns country\_id, country\_name and region\_id and make sure that the column country\_id will be unique and store an auto-incremented value.

Click me to see the solution

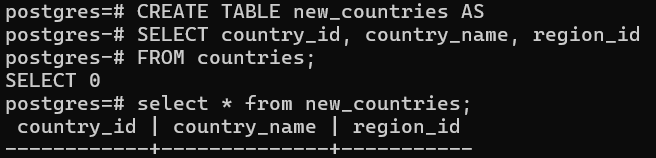
12. Write a PSQL statement to create a table countries including columns country\_id, country\_name and region\_id and make sure that the combination of columns country\_id and region\_id will be unique.

## Source Code & Output:

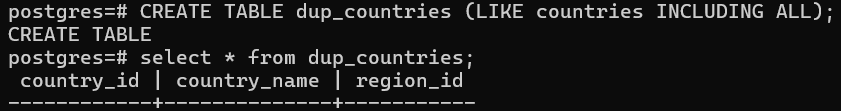
**Task 1:**

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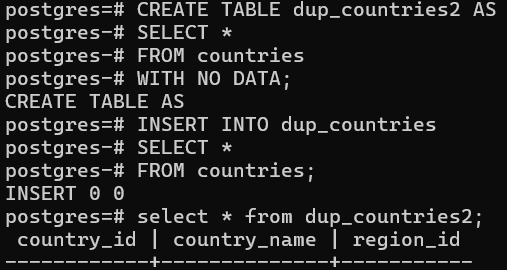
**Task 2:**

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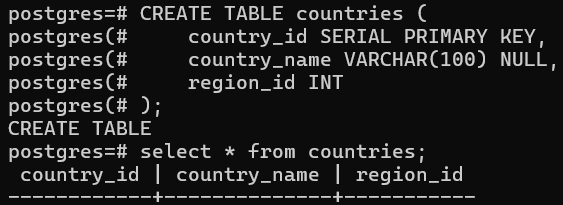
**Task 3:**

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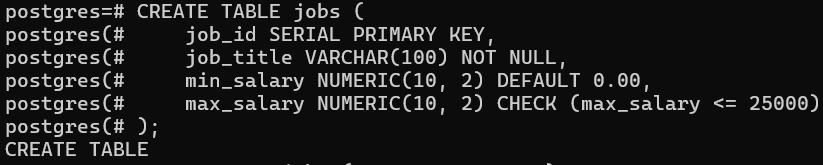
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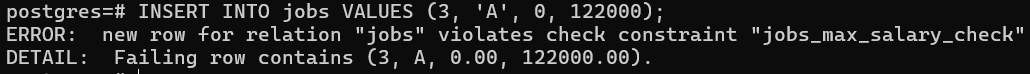
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**Task 5:**

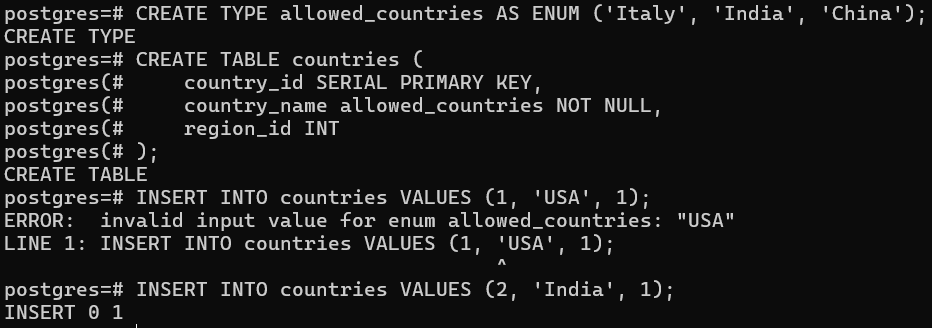
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**Task 6:**

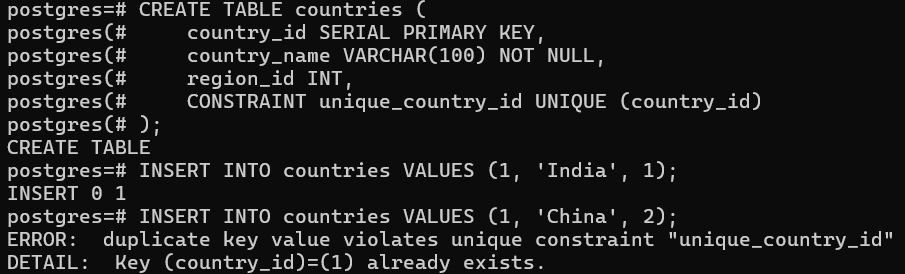
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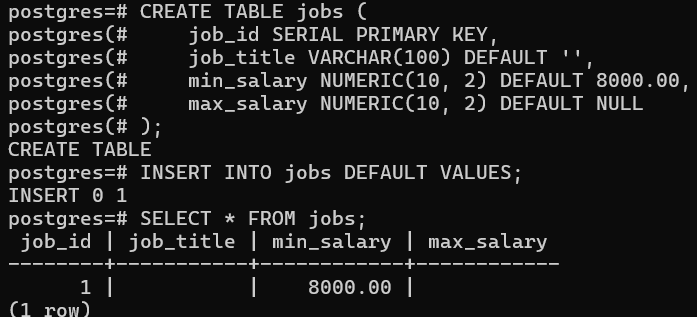
**Task 7:**

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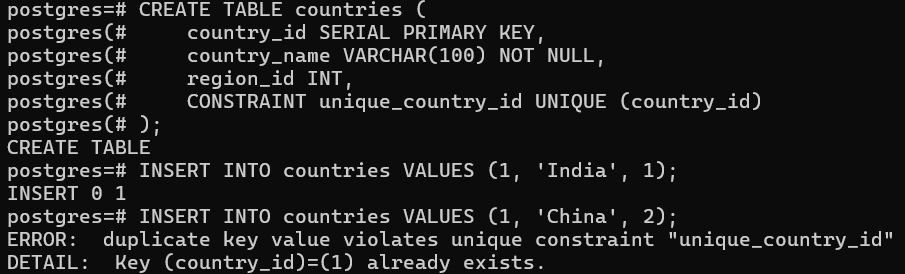
**Task 8:**

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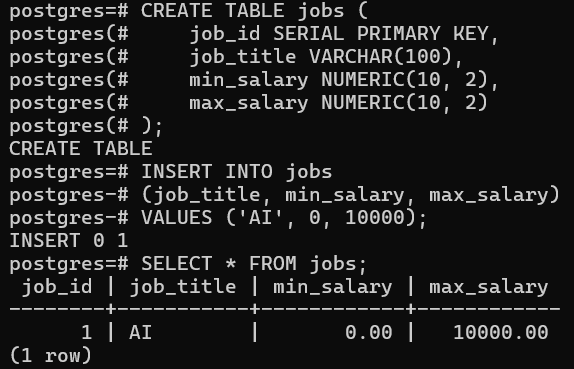
**Task 9:**

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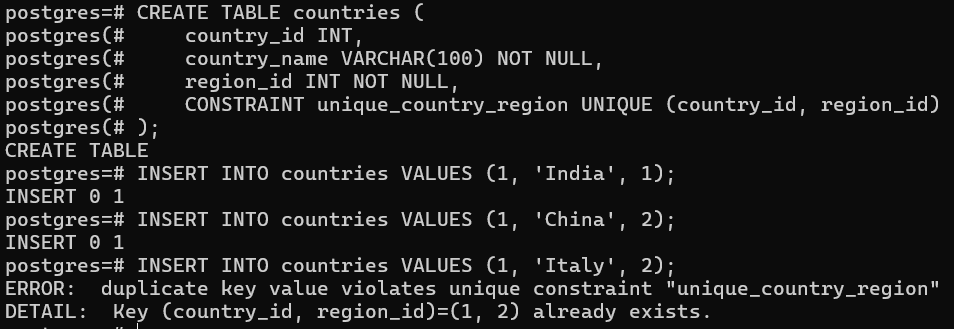
**Task 10:**

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**Task 11:**

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**Task 12:**

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## Conclusion:

* PSQL is PostgreSQL command-line interface for database management.
* Similarity to MySQL language in terms of both statements and structures.
* SERIAL in place of AUTO\_INCREMENT
* Doesn't have an explicit statement for displaying a list of table (but could be done by using command

**\dt**)