Select

Spoken Tutorial Project
http://spoken-tutorial.org
National Mission on Education through ICT
http://sakshat.ac.in

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Learning Objectives

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System Requirements

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- **pgAdmin 1.18**

Pre-requisites

- **Basic understanding of database and tables**

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- **For more details, refer to the RDBMS-PostgreSQL series on http://www.spoken-tutorial.org**

Assignment 1

- **Insert 10 records into the students table**

SELECT

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- **The data is returned in rows and columns format i.e in a tabular format**

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- The **SELECT** statement retrieves data from a database
- The data is returned in rows and columns format i.e in a tabular format
- It has many clauses that we can combine to form a powerful query

Syntax: SELECT

- **SELECT column-names FROM table-name;**

SELECT with WHERE clause

- **To filter the rows which match the criteria that is specified**

SELECT with WHERE clause

- **To filter the rows which match the criteria that is specified**
- **To limit the number of rows**

Syntax: SELECT with WHERE clause

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- **SELECT column-names FROM table-name WHERE condition;**

Comparison/ Relational Operators

=	equal to
<>or !=	not equal to
<	less than
>	greater than
<=	less than or equal to
>=	greater than or equal to

Arithmetic expressions

- **When we need to do calculations within SQL statements**

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- **Arithmetic expressions contain column names, arithmetic operators and numeric values**
- **Arithmetic operators will not work for character data type columns**

Column Alias

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- **An alias is used to rename a column temporarily**

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- **An alias is used to rename a column temporarily**
- **It appears as a heading in the output of the query**

Column Alias

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Use column alias

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Use column alias

- **If the original column name is not meaningful**

Column Alias

Use column alias

- **If the original column name is not meaningful**
- **when there is a column name conflict**

Logical operators

- **Logical operators are used where more than one condition needs to be checked**

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- **Logical operators are used where more than one condition needs to be checked**
- **Using logical operators, we can combine two or more conditions**

AND

Logical operators

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- **This joins two or more conditions**

Logical operators

AND

- **This joins two or more conditions**
- **It returns results only when all the conditions are true**

OR

OR

- **This joins two or more conditions**

Logical operators

OR

- **This joins two or more conditions**
- **It returns results when at least one of the conditions is true**

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Logical operators

OR

- **This joins two or more conditions**
- **It returns results when at least one of the conditions is true**

NOT

Logical operators

OR

- **This joins two or more conditions**
- **It returns results when at least one of the conditions is true**

NOT

- **Results in the reverse of a condition**

Summary

In this tutorial we have learnt about

- **Basic Select statement**
- **Select with WHERE clause**
- **Select with relational operators**
- **Select with logical operators**
- **Alias for column names**

Assignment

Write a SELECT statement to

1. **Display all columns from students table for the student name 'Ram'**

2. **Display studentid, studentname, dob of students whose cgpa is greater than 8 and less that 9.5**

About the Spoken Tutorial Project

- Watch the video available at http://spoken-tutorial.org /What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it

Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- **Conducts workshops using spoken tutorials**

- **Gives certificates on passing online test**

- **For more details, please write to contact@spoken-tutorial.org**

Forum for specific questions

- **Do you have questions in THIS Spoken Tutorial?**
- **Please visit http://forums.spoken-tutorial.org**
- **Choose the minute and second where you have the question**
- **Explain your question briefly**
- **Someone from our team will answer them**

Acknowledgements

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- **It is supported by the National Mission on Education through ICT, MHRD, Government of India**
- **More information on this Mission is available at http://spoken-tutorial.org /NMEICT-Intro**