

Database Programming with SQL

* 1. : Logical Comparisons and Precedence Rules Practice Activities

# Objectives

* + - Evaluate logical comparisons to restrict the rows returned based on two or more conditions
    - Apply the rules of precedence to determine the order in which expressions are evaluated and calculated

# Vocabulary

Identify the vocabulary word for each definition below.

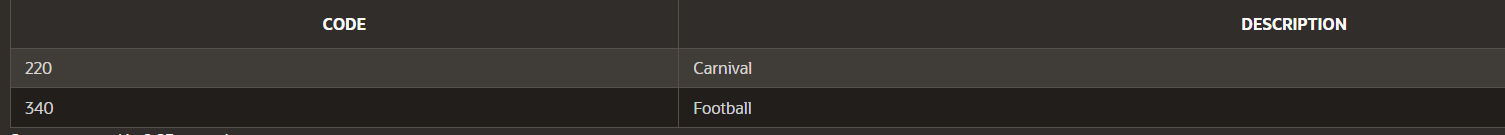
|  |  |
| --- | --- |
| **NOT** | Inverts the value of the condition |
| **AND** | Both conditions must be true for a record to be selected |
| **правила приоритета** | Rules that determine the order in which expressions are evaluated and calculated |
| **OR** | Either condition can be true for a record to be selected |

# Try It / Solve It

1. Execute the two queries below. Why do these nearly identical statements produce two different results? Name the difference and explain why.

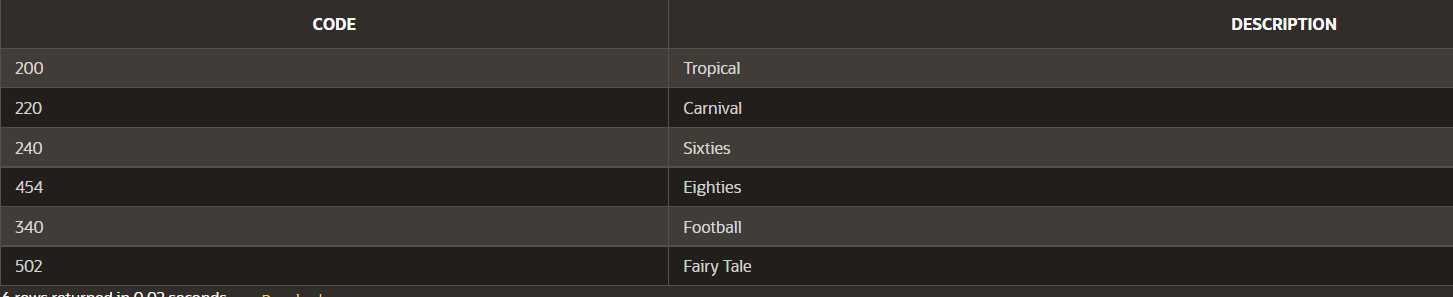
SELECT code, description FROM d\_themes

WHERE code >200 AND description IN('Tropical', 'Football', 'Carnival');



SELECT code, description FROM d\_themes

WHERE code >200 OR description IN('Tropical', 'Football', 'Carnival');



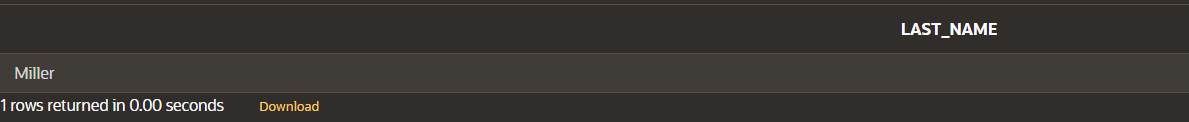
**В первом используется И, поэтому любая из сторон должна возвращать истину, а во втором случае — ИЛИ, может прийти больше записей, потому что для выбора строки любая из сторон должна быть истинна.**

1. Display the last names of all Global Fast Foods employees who have “e” and “i” in their last names.

**SELECT last\_name**

**FROM f\_staffs**

**WHERE  last\_name LIKE '%e%' AND last\_name LIKE '%i%';**



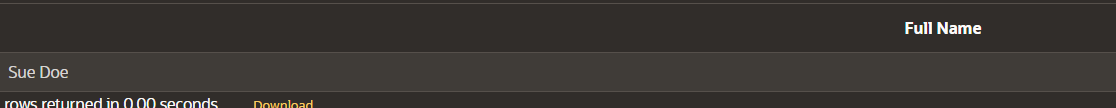
**Miller**

1. I need to know who the Global Fast Foods employees are that make more than $6.50/hour and their position is not order taker.

**SELECT first\_name  ||  ' '  || last\_name  as "Full Name"**

**FROM f\_staffs**

**WHERE  salary > 6.5 AND staff\_type = 'Order Taker';**

****

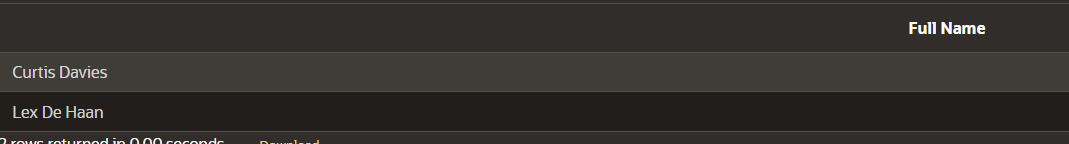
**Sue Doe**

1. Using the employees table, write a query to display all employees whose last names start with “D” and have “a” and “e” anywhere in their last name.

**SELECT first\_name  ||  ' '  || last\_name  as "Full Name"**

**FROM employees**

**WHERE  last\_name LIKE 'D%' AND last\_name LIKE '%a%' AND last\_name LIKE '%e%';**



**Curtis Davies**

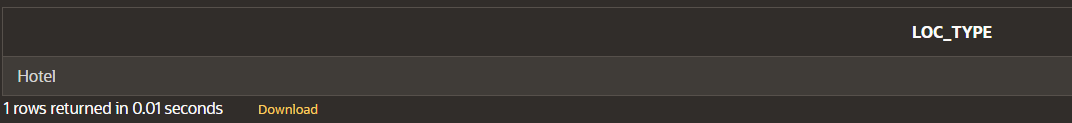
**Lex De Haan**

1. In which venues did DJs on Demand have events that were not in private homes?

**SELECT DISTINCT d\_venues.loc\_type**

**FROM  d\_events  JOIN d\_venues   ON  d\_events.venue\_id = d\_venues.id**

**WHERE d\_venues.loc\_type != 'Private Home';**



**Hotel**

1. Which list of operators is in the correct order from highest precedence to lowest precedence?
   1. AND, NOT, OR
   2. NOT, OR, AND
   3. **NOT, AND, OR**

**For questions 7 and 8, write SQL statements that will produce the desired output.**

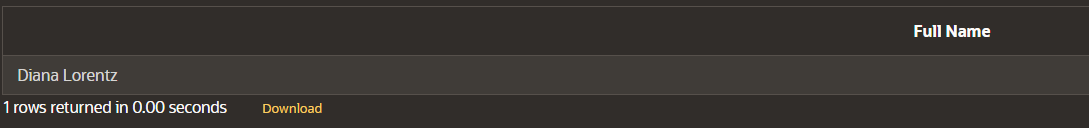
1. Who am I?

I was hired by Oracle after May 1998 but before June of 1999. My salary is less than $8000 per month, and I have an “en” in my last name.

**SELECT first\_name || ' ' || last\_name as "Full Name"**

**FROM employees**

**WHERE hire\_date > '1998-05-31' AND hire\_date < '1999-06-01' AND salary < 8000 AND last\_name like '%en%';**



**Diana Lorentz**

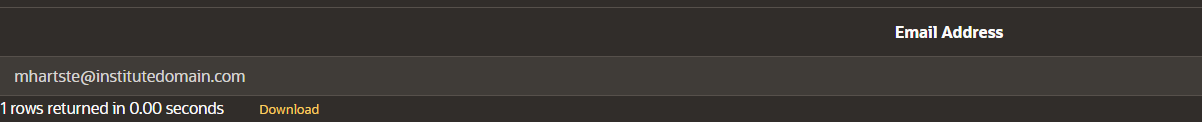
1. What's my email address?

Because I have been working for Oracle since the beginning of 1996, I make more than $9000 per month. Because I make so much money, I don't get a commission.

**SELECT LOWER(email) || '@institutedomain.com' as "Email Address"**

**FROM employees**

**WHERE salary > 9000 AND (commission\_pct = 0 OR commission\_pct IS NULL) AND hire\_date >= '1996-01-01' AND hire\_date <= '1996-03-31' ;**



**mhartste@institutedomain.com**

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