





# Practice SQL WHERE Conditions

This page provides exercises and solutions to help you practice SQL WHERE conditions. These exercises are based on the ACDB database, and may be performed online or by running the sample schema scripts on your local database server. For additional exercises in other subjects, use this link.

#### **Exercises**

- 1. Display the first name, last name, and package number for all customers whose last name is "King" (*Customers* table).
- 2. Display all the data from *Packages* table for packages whose speed is "5Mbps".
- 3. Display the first name, last name, package number and monthly discount for all customers with monthly discount less than 30 (*Customers* table).
- 4. Display all the data from *Customers* table for all customers who joined the company before January 1st, 2007.
- 5. Display the customer number, first name ,state, city and package number for all customers whose package number equals 21, 28, or 14 (*Customers* table).
- 6. Display the customer number, first name ,state, city and package number for all customers whose package number is not equal to 27, 10, or 3 (*Customers* table).
- 7. Display the last name, main phone number, monthly discount and package number for all customers whose customer number equals 703, 314 or 560 (*Customers* table).
- 8. Display the first name and monthly discount for all customers whose first name ends with an *e* (*Customers* table).
- 9. Display the last name and package number for all customers where the second letter of their last name is *d* (*Customers* table).

- 10. Display all the data from Customers table for all customers who have the letters: *I*, *j* or *h* in their last name. Order the query in descending order by monthly discount (*Customers* table).
- 11. Display the first name, join date, monthly discount and package number for all customers who don't have the letter *a* in their last name. Order the query in ascending order by package number (*Customers* table).
- 12. Display all data from *Customers* table for all customers without a package (package number is null)
- 13. Display the first name concatenated with the last name (separated by space), and monthly discount for all customers whose monthly discount is not in the range between 20 and 30. Order the query in ascending order by the full name (*Customers* table).
- 14. Display the first name concatenated with the last name (separated by space), the main phone number concatenated with street (separated by space), and monthly discount for all customers whose monthly discount is in the range between 11 and 27. Name the column headings FULL\_NAME, CONTACTS, and DC respectively (*Customers* table).
- 15. Display all data from Customers table for :
  - 1. All customers who live in New York **and** whose monthly discount is in the range between 30 and 40 **or**
  - 2. All customers whose package number is not 8,19, or 30 and whose join date is before January 1st, 2007
- 16. Display the last name, package number, and birthdate for all customers whose join date is in the range between *December 12th*, 2007 and *April 17th*, 2010 (*Customers* table).
- 17. Display the package number, start date, and speed for all packages whose start date is before January 1st, 2007 (*Packages* table)
- 18. Display the package number, speed, and sector number for all packages whose sector number equals 1 (*Packages* table).
- 19. Display the package number, speed and sector number for all packages with internet speed of "5Mbps" or "10Mbps" (*Packages* table).
- 20. Display the last name and monthly discount for all customers live in

- Orlando (Customers table).
- 21. Display the last name and package number for all customers whose package number equals 9 or 18. Preform the exercise once using IN operator, once using OR (*Customers* table).
- 22. Display the first name, main phone number and secondary phone number for all customers without a secondary phone number (secondary phone number is null).
- 23. Display the first name, monthly discount and package id for all customers without any monthly discount (monthly discount is null).

#### Solutions – SQL Server

These solutions apply to SQL Server, for solutions that apply to Oracle click here.

```
001
      -- 1
      SELECT first_name , last_name , pack_id
002
003
      FROM
              customers
004
      WHERE last_name = 'king'
005
      -- 2
006
      SELECT *
007
800
      FROM
              packages
009
      WHERE speed = '5Mbps'
010
      -- 3
011
012
      SELECT first_name , last_name , pack_id , monthly_discount
013
      FROM customers
014
      WHERE monthly_discount < 30
015
016
      -- 4
      SELECT *
017
018
      FROM customers
      WHERE join_date < '2007-01-01'
019
020
021
022
      SELECT customer_id , first_name , state , city , pack_id
023
      FROM customers
024
      WHERE pack_id IN (7, 14, 21, 28)
```

```
025
026
      -- 6
027
      SELECT customer_id , first_name , state , city , pack_id
028
      FROM customers
029
      WHERE pack_id NOT IN (27, 10 , 3)
030
031
      -- 7
032
      SELECT last_name , main_phone_num , monthly_discount ,pack.
033
      FROM customers
034
      WHERE customer_id IN (314,560,703)
035
      -- 8
036
      SELECT first_name , monthly_discount
037
038
      FROM
              customers
039
      WHERE first_name LIKE '%E'
040
041
      -- 9
      SELECT last_name , pack_id
042
043
      FROM customers
044
      WHERE last_name LIKE '_D%'
045
046
      -- 10
047
      SELECT *
048
      FROM customers
049
      WHERE last_name LIKE '%L%' OR last_name LIKE '%J%' OR last_i
050
      ORDER BY monthly_discount DESC
051
052
      -- 11
053
      SELECT first_name , join_date, pack_id
054
      FROM
              customers
055
      WHERE first_name NOT LIKE '%A%'
056
      ORDER BY pack_id
057
058
      -- 12
059
      SELECT *
060
      FROM customers
061
      WHERE pack_id IS NULL
062
063
      -- 13
```

```
SELECT first_name + ' ' + last_name AS 'FULL_NAME' ,
064
065
                    monthly_discount
066
     FROM customers
     WHERE monthly_discount NOT BETWEEN 20 AND 30
067
     ORDER BY first_name + ' ' + last_name
068
069
070
      -- 14
071
      SELECT first_name + ' ' + last_name AS 'FULL_NAME' ,
072
                    main_phone_num + ' - ' + street AS 'CONTACTS'
073
                    monthly_discount AS 'DC'
074
     FROM
               customers
075
     WHERE monthly_discount BETWEEN 11 AND 27
076
077
     -- 15
     SELECT *
078
079
     FROM customers
080
     WHERE monthly_discount BETWEEN 30 AND 40 AND state = 'New Yo
081
     OR
082
                   pack_id NOT IN (30, 19, 8) AND join_date < '200
083
     ORDER BY pack_id, monthly_discount
084
085
      -- 16
086
      SELECT last_name , pack_id , birth_date
087
     FROM customers
088
     WHERE join_date BETWEEN '2007-12-12' AND '2010-04-17'
089
     ORDER BY birth_date
090
091
      -- 17
092
      SELECT pack_id , strt_date , speed
093
     FROM packages
     WHERE strt date < '2007-01-01'
094
095
096
     -- 18
097
      SELECT pack_id , speed , sector_id
098
     FROM packages
099
     WHERE sector id = 1
100
101
      -- 19
102
     SELECT pack_id , speed , sector_id
```

```
103
      FROM packages
     WHERE speed IN ('5Mbps', '10Mbps')
104
105
106
      -- 20
      SELECT last_name , monthly_discount
107
108
     FROM customers
109
     WHERE city = 'Orlando'
110
111
      -- 21
112
      SELECT last_name , pack_id
113
     FROM customers
114
     WHERE pack_id IN (9, 18)
115
116
     SELECT last_name , pack_id
117
     FROM customers
118
     WHERE pack_id = 9
119
     OR
120
         pack_id = 18
121
122
     -- 22
123
     SELECT first_name , main_phone_num , secondary_phone_num
124
     FROM customers
125
     WHERE secondary_phone_num IS NULL
126
127
     -- 23
128
     SELECT first_name, monthly_discount, pack_id
129
     FROM customers
130
     WHERE monthly_discount IS NULL
```

### Solutions - Oracle

```
001
      -- 1
002
      SELECT first_name , last_name , pack_id
003
      FROM
              customers
004
      WHERE last_name = 'king'
005
006
      -- 2
007
      SELECT *
800
      FROM
              packages
```

```
009
     WHERE speed = '5Mbps'
010
     -- 3
011
     SELECT first_name , last_name , pack_id , monthly_discount
012
013
     FROM customers
014
     WHERE monthly_discount < 30
015
016
      -- 4
017
     SELECT *
018
     FROM customers
019
     WHERE join_date < '01-JAN-2007'
020
021
     -- 5
022
      SELECT customer_id , first_name , state , city , pack_id
023
     FROM customers
     WHERE pack_id IN (7, 14, 21, 28)
024
025
026
      -- 6
027
      SELECT customer_id , first_name , state , city , pack_id
028
     FROM customers
029
     WHERE pack_id NOT IN (27, 10, 3)
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     -- 7
032
      SELECT last_name , main_phone_num , monthly_discount ,pack
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     FROM customers
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     WHERE customer_id IN (314,560,703)
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      -- 8
037
      SELECT first_name , monthly_discount
038
      FROM
              customers
039
     WHERE first name LIKE '%E'
040
041
     -- 9
042
      SELECT last_name , pack_id
043
     FROM customers
044
     WHERE last name LIKE ' D%'
045
046
      -- 10
047
      SELECT *
```

```
048
      FROM customers
049
      WHERE last_name LIKE '%L%' OR last_name LIKE '%J%' OR last_i
050
      ORDER BY monthly_discount DESC
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      FROM
              customers
055
      WHERE first_name NOT LIKE '%A%'
056
      ORDER BY pack_id
057
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      -- 12
059
      SELECT *
060
      FROM customers
061
      WHERE pack_id IS NULL
062
063
      -- 13
      SELECT first_name | | ' ' | | last_name AS "FULL_NAME" ,
064
065
                    monthly_discount
066
      FROM customers
     WHERE monthly_discount NOT BETWEEN 20 AND 30
067
      ORDER BY first_name || ' ' || last_name
068
069
070
      -- 14
      SELECT first_name | | ' ' | | last_name AS "FULL_NAME",
071
072
                    main_phone_num | | ' - ' | | street AS "CONTACT!
073
                    monthly_discount AS "DC"
074
      FROM
               customers
075
      WHERE monthly_discount BETWEEN 11 AND 27
076
077
      -- 15
      SELECT *
078
079
      FROM customers
080
      WHERE monthly_discount BETWEEN 30 AND 40 AND state = 'New Yo
081
      OR
082
                   pack_id NOT IN (30, 19, 8) AND join_date < '01
083
      ORDER BY pack_id, monthly_discount
084
085
      -- 16
086
      SELECT last_name , pack_id , birth_date
```

```
087
      FROM customers
088
     WHERE join_date BETWEEN '12-DEC-2007' AND '17-APR-2010'
089
     ORDER BY birth_date
090
     -- 17
091
092
      SELECT pack_id , strt_date , speed
093
     FROM packages
     WHERE strt_date < '01-JAN-2007'
094
095
096
      -- 18
097
      SELECT pack_id , speed , sector_id
     FROM packages
098
099
     WHERE sector_id = 1
100
101
     -- 19
102
     SELECT pack_id , speed , sector_id
103
     FROM packages
     WHERE speed IN ('5Mbps', '10Mbps')
104
105
     -- 20
106
107
     SELECT last_name , monthly_discount
108
     FROM customers
109
     WHERE city = 'Orlando'
110
111
     -- 21
112
      SELECT last_name , pack_id
113
      FROM customers
114
     WHERE pack_id IN (9, 18)
115
116
     SELECT last_name , pack_id
117
     FROM customers
118
     WHERE pack_id = 9
119
     OR
120
          pack_id = 18
121
122
      -- 22
123
     SELECT first_name , main_phone_num , secondary_phone_num
124
      FROM customers
125
     WHERE secondary_phone_num IS NULL
```

```
126
127
      -- 23
     SELECT first_name , monthly_discount, pack_id
128
129
     FROM customers
     WHERE monthly_discount IS NULL
130
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```

## Login

