

WHERE

✓ Used to **FILTER** the data in the output

✓ Always after FROM

SYNTAX

```
SELECT  
column_name1,  
column_name2  
FROM table_name  
WHERE condition
```

SYNTAX

SELECT

*

FROM payment

WHERE amount = 10.99

| Data Output | | | | | | | Explain | Messages | Notifications |
|-------------|-----------------------|-------------------------|----------------------|----------------------|-------------------------|--|---------|----------|---------------|
| | payment_id integer | customer_id smallint | staff_id smallint | rental_id integer | amount numeric (5,2) | payment_date timestamp with time zone | | | |
| 1 | 16073 | 276 | 1 | 860 | 10.99 | 2020-01-30 02:13:42.996577+01 | | | |
| 2 | 16125 | 304 | 1 | 135 | 10.99 | 2020-01-25 21:27:24.996577+01 | | | |
| 3 | 16358 | 433 | 1 | 691 | 10.99 | 2020-01-29 00:29:52.996577+01 | | | |

SYNTAX

```
SELECT  
first_name,  
last_name  
FROM customer  
WHERE first_name = 'ADAM'
```

| Data Output | | | | Explain | Messages | Notifications |
|-------------|--------------------|-------------------|--|---------|----------|---------------|
| | first_name text | last_name text | | | | |
| 1 | ADAM | GOOCH | | | | |

SYNTAX

```
SELECT  
first_name,  
last_name  
FROM customer  
WHERE first_name = 'ADAM'
```

| Data Output | | | | Explain | Messages | Notifications |
|-------------|--------------------|-------------------|--|---------|----------|---------------|
| | first_name text | last_name text | | | | |
| 1 | ADAM | GOOCH | | | | |



Challenge

Challenge

How many payment were made by the customer with customer_id = 100?

What is the last name of our customer with first name 'ERICA'?

Write a SQL query to get the answers

Result

| Data Output | | Explain |
|-------------|-----------------|---------|
| | count bigint | |
| 1 | 24 | |

| Data Output | | Explain | Message |
|-------------|--------------------|-------------------|---------|
| | first_name text | last_name text | |
| 1 | ERICA | MATTHEWS | |

SYNTAX

SELECT

*

FROM payment

WHERE amount > 10.99

| Data Output | | | | | | | Explain | Messages | Notifications |
|-------------|---|---|--|--|---|--|---------|----------|---------------|
| | <div>payment_id<div>integer</div></div> | <div>customer_id<div>smallint</div></div> | <div>staff_id<div>smallint</div></div> | <div>rental_id<div>integer</div></div> | <div>amount<div>numeric (5,2)</div></div> | <div>payment_date<div>timestamp with time zone</div></div> | | | |
| 1 | 17055 | 196 | 2 | 106 | 11.99 | 2020-01-25 17:46:45.996577+01 | | | |
| 2 | 17354 | 305 | 1 | 2166 | 11.99 | 2020-02-17 23:19:47.996577+01 | | | |
| 3 | 20403 | 362 | 1 | 14759 | 11.99 | 2020-03-21 22:57:24.996577+01 | | | |








SYNTAX

SELECT

*

FROM payment

WHERE amount < 10.99

| Data Output | | Explain | Messages | Notifications | | |
|---|---|---|--|--|---|--|
|  | payment_id integer  | customer_id smallint  | staff_id smallint  | rental_id integer  | amount numeric (5,2)  | payment_date timestamp with time zone  |
| 1 | 16050 | 269 | 2 | 7 | 1.99 | 2020-01-24 22:40:19.996577+01 |
| 2 | 16051 | 269 | 1 | 98 | 0.99 | 2020-01-25 16:16:50.996577+01 |
| 3 | 16052 | 269 | 2 | 678 | 6.99 | 2020-01-28 22:44:14.996577+01 |

SYNTAX

SELECT

*

FROM payment

WHERE amount < 10.99

ORDER BY amount DESC

| Data Output | | Explain | Messages | Notifications | | |
|-------------|------------------------------|--------------------------------|-----------------------------|-----------------------------|--------------------------------|---|
| | <div>payment_idinteger</div> | <div>customer_idsmallint</div> | <div>staff_idsmallint</div> | <div>rental_idinteger</div> | <div>amountnumeric (5,2)</div> | <div>payment_datetimestamp with time zone</div> |
| 1 | 22124 | 542 | 2 | 14982 | 9.99 | 2020-03-22 06:49:21.996577+01 |
| 2 | 22127 | 543 | 2 | 11241 | 9.99 | 2020-03-02 12:57:50.996577+01 |
| 3 | 29567 | 51 | 1 | 3525 | 9.99 | 2020-04-06 00:31:05.996577+02 |

SYNTAX

SELECT

*

FROM payment

WHERE amount <= 10.99

ORDER BY amount DESC

Data Output Explain Messages Notifications

| | payment_id integer | customer_id smallint | staff_id smallint | rental_id integer | amount numeric (5,2) | payment_date timestamp with time zone |
|---|-----------------------|-------------------------|----------------------|----------------------|-------------------------|--|
| 1 | 23952 | 136 | 2 | 11992 | 10.99 | 2020-03-17 17:55:48.996577+01 |
| 2 | 31310 | 212 | 2 | 4708 | 10.99 | 2020-04-08 11:27:45.996577+02 |
| 3 | 20817 | 404 | 2 | 15290 | 10.99 | 2020-03-22 18:56:28.996577+01 |

SYNTAX

SELECT

*

FROM payment

WHERE amount >= 10.99

ORDER BY amount DESC

Data Output Explain Messages Notifications

| | payment_id integer | customer_id smallint | staff_id smallint | rental_id integer | amount numeric (5,2) | payment_date timestamp with time zone |
|---|-----------------------|-------------------------|----------------------|----------------------|-------------------------|--|
| 1 | 20403 | 362 | 1 | 14759 | 11.99 | 2020-03-21 22:57:24.996577+01 |
| 2 | 24866 | 237 | 2 | 11479 | 11.99 | 2020-03-02 21:46:39.996577+01 |
| 3 | 17055 | 196 | 2 | 106 | 11.99 | 2020-01-25 17:46:45.996577+01 |








SYNTAX

SELECT

*

FROM payment

WHERE amount != 10.99

| Data Output | | Explain | Messages | Notifications | | |
|-------------|---|---|--|--|---|--|
| |  payment_id  integer | customer_id  smallint | staff_id  smallint | rental_id  integer | amount  numeric (5,2) | payment_date  timestamp with time zone |
| 1 | 16050 | 269 | 2 | 7 | 1.99 | 2020-01-24 22:40:19.996577+01 |
| 2 | 16051 | 269 | 1 | 98 | 0.99 | 2020-01-25 16:16:50.996577+01 |
| 3 | 16052 | 269 | 2 | 678 | 6.99 | 2020-01-28 22:44:14.996577+01 |








SYNTAX

SELECT

*

FROM payment

WHERE amount <> 10.99

| Data Output | | Explain | Messages | Notifications | | |
|-------------|---|---|--|--|---|--|
| |  payment_id  integer | customer_id  smallint | staff_id  smallint | rental_id  integer | amount  numeric (5,2) | payment_date  timestamp with time zone |
| 1 | 16050 | 269 | 2 | 7 | 1.99 | 2020-01-24 22:40:19.996577+01 |
| 2 | 16051 | 269 | 1 | 98 | 0.99 | 2020-01-25 16:16:50.996577+01 |
| 3 | 16052 | 269 | 2 | 678 | 6.99 | 2020-01-28 22:44:14.996577+01 |

SYNTAX

SELECT

*

FROM payment

WHERE amount <= 10.99

ORDER BY amount DESC

SYNTAX

```
SELECT  
  first_name,  
  last_name  
FROM customer  
WHERE first_name is null
```


Side note!

Case sensitive or not?

SYNTAX

```
SELECT  
first_name,  
last_name  
FROM customer  
WHERE first_name is not null
```

Side note!

Case sensitive or not?

SYNTAX

```
select  
first_name,  
last_name  
FROM customer  
WHERE first_name = 'ADAM'
```

Data Output

Explain

Messages

Notifications

| | first_name text | last_name text |
|---|--------------------|-------------------|
| 1 | ADAM | GOOCH |

Side note!

Case sensitive or not?

SYNTAX

```
seLEcT  
first_name,  
last_name  
FROM customer  
WHERE first_name = 'ADAM'
```

| Data Output | | | | Explain | Messages | Notifications |
|-------------|--------------------|-------------------|--|---------|----------|---------------|
| | first_name text | last_name text | | | | |
| 1 | ADAM | GOOCH | | | | |

Side note!

Case sensitive or not?

SYNTAX

```
select  
  FIRst_nAme,  
  last_name  
FROM customer  
WHERE first_name = 'ADAM'
```

| Data Output | | | | Explain | Messages | Notifications |
|-------------|--------------------|-------------------|--|---------|----------|---------------|
| | first_name text | last_name text | | | | |
| 1 | ADAM | GOOCH | | | | |

Side note!

Case sensitive or not?

SYNTAX

```
select  
  "first_name",  
  last_name  
FROM customer  
WHERE first_name = 'ADAM'
```

| Data Output | | | | Explain | Messages | Notifications |
|-------------|--------------------|-------------------|--|---------|----------|---------------|
| | first_name text | last_name text | | | | |
| 1 | ADAM | GOOCH | | | | |

SYNTAX

```
select  
  "First_name",  
  last_name  
FROM customer  
WHERE first_name = 'ADAM'
```

Data Output Explain Messages Notifications

ERROR: column "First_name" does not exist

LINE 3: "First_name",
 ^

HINT: Perhaps you meant to reference the column "customer.first_name".

SQL state: 42703

Character: 10



Challenge

Challenge

The inventory manager asks you how rentals have not been returned yet (return_date is null).

The sales manager asks you how for a list of all the payment_ids with an amount less than or equal to \$2. Include payment_id and the amount.

Write a SQL query to get the answers!

Result

| Data Output | | Explain |
|-------------|-----------------|---------|
| | count bigint | |
| 1 | 183 | |

| Data Output | | Explain | Message |
|-------------|-----------------------|-------------------------|---------|
| | payment_id integer | amount numeric (5,2) | |
| 1 | 16050 | 1.99 | |
| 2 | 16051 | 0.99 | |
| 3 | 16053 | 0.99 | |
| 4 | 16056 | 1.99 | |
| 5 | 16059 | 0.99 | |

AND / OR

✓ Used to **connect** two conditions

SYNTAX

```
SELECT  
column_name1,  
column_name2  
FROM table_name  
WHERE condition1  
AND condition2  
AND condition3
```

Note!

ALL conditions must be
true!

SYNTAX








SELECT

*

FROM payment

WHERE amount = 10.99

AND customer_id = 426

| Data Output | | Explain | Messages | Notifications | | |
|---|---|---|--|--|---|--|
|  | payment_id integer  | customer_id smallint  | staff_id smallint  | rental_id integer  | amount numeric (5,2)  | payment_date timestamp with time zone  |
| 1 | 26978 | 426 | 1 | 7527 | 10.99 | 2020-04-27 20:42:54.996577+02 |
| 2 | 26983 | 426 | 2 | 10172 | 10.99 | 2020-04-30 22:58:17.996577+02 |

SYNTAX

SELECT

*

FROM payment

WHERE amount = 10.99

OR amount = 9.99

Data Output

Explain

Messages

Notifications

| | payment_id integer | customer_id smallint | staff_id smallint | rental_id integer | amount numeric (5,2) | payment_date timestamp with time zone |
|---|-----------------------|-------------------------|----------------------|----------------------|-------------------------|--|
| 1 | 16073 | 276 | 1 | 860 | 10.99 | 2020-01-30 02:13:42.996577+01 |
| 2 | 16125 | 304 | 1 | 135 | 10.99 | 2020-01-25 21:27:24.996577+01 |
| 3 | 16160 | 318 | 1 | 224 | 9.99 | 2020-01-26 09:46:53.996577+01 |

SYNTAX

SELECT

*

FROM payment

WHERE amount = 10.99 OR 9.99

Data Output

Explain

Messages

Notifications

ERROR: argument of OR must be type boolean, not type numeric

LINE 6: OR 9.99

^

SQL state: 42804

Character: 53

SYNTAX

SELECT

*

FROM payment

WHERE amount = 10.99

OR amount = 9.99

AND customer_id = 426

Data Output Explain Messages Notifications

| | payment_id integer | customer_id smallint | staff_id smallint | rental_id integer | amount numeric (5,2) | payment_date timestamp with time zone |
|---|-----------------------|-------------------------|----------------------|----------------------|-------------------------|--|
| 1 | 16073 | 276 | 1 | 860 | 10.99 | 2020-01-30 02:13:42.996577+01 |
| 2 | 16125 | 304 | 1 | 135 | 10.99 | 2020-01-25 21:27:24.996577+01 |
| 3 | 16358 | 433 | 1 | 691 | 10.99 | 2020-01-29 00:29:52.996577+01 |

SYNTAX

SELECT

*

FROM payment

WHERE amount = 10.99

OR (amount = 9.99

AND customer_id = 426)

Data Output

Explain

Messages

Notifications

| | payment_id integer | customer_id smallint | staff_id smallint | rental_id integer | amount numeric (5,2) | payment_date timestamp with time zone |
|---|-----------------------|-------------------------|----------------------|----------------------|-------------------------|--|
| 1 | 16073 | 276 | 1 | 860 | 10.99 | 2020-01-30 02:13:42.996577+01 |
| 2 | 16125 | 304 | 1 | 135 | 10.99 | 2020-01-25 21:27:24.996577+01 |
| 3 | 16358 | 433 | 1 | 691 | 10.99 | 2020-01-29 00:29:52.996577+01 |

SYNTAX

SELECT

*

FROM payment

WHERE (amount = 10.99

OR amount = 9.99)

AND customer_id = 426

Data Output Explain Messages Notifications

| | payment_id integer | customer_id smallint | staff_id smallint | rental_id integer | amount numeric (5,2) | payment_date timestamp with time zone |
|---|-----------------------|-------------------------|----------------------|----------------------|-------------------------|--|
| 1 | 26978 | 426 | 1 | 7527 | 10.99 | 2020-04-27 20:42:54.996577+02 |
| 2 | 26983 | 426 | 2 | 10172 | 10.99 | 2020-04-30 22:58:17.996577+02 |

SYNTAX

```
SELECT  
first_name,  
last_name  
FROM customer  
WHERE first_name = 'ADAM'
```

| Data Output | | | | Explain | Messages | Notifications |
|-------------|--------------------|-------------------|--|---------|----------|---------------|
| | first_name text | last_name text | | | | |
| 1 | ADAM | GOOCH | | | | |



Challenge








Challenge

The suppcity manager asks you about a list of all the payment of the customer 322, 346 and 354 where the amount is either less than \$2 or greater than \$10.

It should be ordered by the customer first (ascending) and then as second condition order by amount in a descending order.

Write a SQL query to get the answers!

Result

| Data Output | | | | | | | Explain | Messages | Notifications |
|-------------|--|---|--|---|--|---|---------|----------|---------------|
| |  payment_id  | customer_id  | staff_id  | rental_id  | amount  numeric (5,2) | payment_date  timestamp with time zone | | | |
| 1 | 25784 | 322 | 2 | 3627 | 1.99 | 2020-04-06 05:47:51.996577+02 | | | |
| 2 | 25794 | 322 | 1 | 9252 | 1.99 | 2020-04-30 13:48:25.996577+02 | | | |
| 3 | 16167 | 322 | 2 | 166 | 0.99 | 2020-01-26 02:17:37.996577+01 | | | |

BETWEEN ... AND ...

✓ Used to filter a range of values

SYNTAX

```
SELECT  
payment_id,  
amount  
FROM payment  
WHERE amount NOT BETWEEN 1.99 AND 6.99
```

| | Data Output | Explain | Messages |
|---|-----------------------|-------------------------|----------|
| | payment_id integer | amount numeric (5,2) | |
| 1 | 16051 | 0.99 | |
| 2 | 16053 | 0.99 | |
| 3 | 16058 | 8.99 | |
| 4 | 16059 | 0.99 | |

SYNTAX

```
SELECT  
payment_id,  
amount  
FROM payment  
WHERE amount BETWEEN '2020-01-24' AND '2020-01-26'
```

| | Data Output | Explain | Messages | Notifications |
|---|-----------------------|--|----------|---------------|
| | payment_id integer | payment_date timestamp with time zone | | |
| 1 | 16050 | 2020-01-24 22:40:19.996577+01 | | |
| 2 | 16051 | 2020-01-25 16:16:50.996577+01 | | |
| 3 | 16059 | 2020-01-25 03:47:17.996577+01 | | |
| 4 | 16063 | 2020-01-25 19:14:47.996577+01 | | |

SYNTAX

```
SELECT  
payment_id,  
amount  
FROM payment  
WHERE amount BETWEEN '2020-01-24 0:00' AND '2020-01-26 0:00'
```

| | Data Output | Explain | Messages | Notifications |
|---|-----------------------|--|----------|---------------|
| | payment_id integer | payment_date timestamp with time zone | | |
| 1 | 16050 | 2020-01-24 22:40:19.996577+01 | | |
| 2 | 16051 | 2020-01-25 16:16:50.996577+01 | | |
| 3 | 16059 | 2020-01-25 03:47:17.996577+01 | | |
| 4 | 16063 | 2020-01-25 19:14:47.996577+01 | | |

SYNTAX

```
SELECT  
payment_id,  
amount  
FROM payment  
WHERE amount BETWEEN '2020-01-24 0:00' AND '2020-01-26 12:00'
```

| | Data Output | Explain | Messages | Notifications |
|---|-----------------------|--|----------|---------------|
| | payment_id integer | payment_date timestamp with time zone | | |
| 1 | 16050 | 2020-01-24 22:40:19.996577+01 | | |
| 2 | 16051 | 2020-01-25 16:16:50.996577+01 | | |
| 3 | 16059 | 2020-01-25 03:47:17.996577+01 | | |
| 4 | 16063 | 2020-01-25 19:14:47.996577+01 | | |



Challenge

Challenge

There have been 6 complaints of customers about their payments.

customer_id: 12,25,67,93,124,234

The concerned payments are all the payments of these customers with amounts 4.99, 7.99 and 9.99 in January 2020.

Write a SQL query to get a list of the concerned payments!

Result

It should be 7 payments!



Challenge

Challenge

There have been some faulty payments and you need to help to find out how many payments have been affected.

How many payments have been made on **January 26th and 27th 2020** (including entire 27th) with an amount **between 1.99 and 3.99**?

Write a SQL query to get the answers!

Result

| Data Output | | Explain | M |
|-------------|-----------------|---------|---|
| | count bigint | | |
| 1 | 45 | | |

LIKE

✓ Used to filter by matching against a pattern

✓ Use wildcards:

_

any single character

✓ Use wildcards:

%

any sequence of characters

SYNTAX

SELECT

*

FROM actor

WHERE first_name LIKE 'A%'

| | Data Output | Explain | Messages | Notifications |
|---|--------------------------|--------------------|-------------------|---|
| | actor_id [PK] integer | first_name text | last_name text | last_update timestamp with time zone |
| 1 | 29 | ALEC | WAYNE | 2020-02-15 10:34:33+01 |
| 2 | 34 | AUDREY | OLIVIER | 2020-02-15 10:34:33+01 |
| 3 | 49 | ANNE | CRONYN | 2020-02-15 10:34:33+01 |

Note!

It's case-sensitive

SYNTAX

```
SELECT  
first_name  
FROM actor  
WHERE first_name LIKE 'a%'
```

| Data Output | Explain | Messages | Notifications |
|---|---|--|--|
| <div><div>actor_id</div><div>[PK] integer</div></div> | <div><div>first_name</div><div>text</div></div> | <div><div>last_name</div><div>text</div></div> | <div><div>last_update</div><div>timestamp with time zone</div></div> |
| | | | |

Note!

It's case-sensitive

SYNTAX

```
SELECT  
first_name  
FROM actor  
WHERE first_name ILIKE 'a%'
```

| | Data Output | Explain | Messages | Notifications |
|---|--------------------------|--------------------|-------------------|---|
| | actor_id [PK] integer | first_name text | last_name text | last_update timestamp with time zone |
| 1 | 29 | ALEC | WAYNE | 2020-02-15 10:34:33+01 |
| 2 | 34 | AUDREY | OLIVIER | 2020-02-15 10:34:33+01 |
| 3 | 49 | ANNE | CRONYN | 2020-02-15 10:34:33+01 |

Note!

ILIKE is case-INsensitive

SYNTAX

SELECT

*

FROM actor

WHERE first_name LIKE 'A%'

| | Data Output | Explain | Messages | Notifications |
|---|--------------------------|--------------------|-------------------|---|
| | actor_id [PK] integer | first_name text | last_name text | last_update timestamp with time zone |
| 1 | 29 | ALEC | WAYNE | 2020-02-15 10:34:33+01 |
| 2 | 34 | AUDREY | OLIVIER | 2020-02-15 10:34:33+01 |
| 3 | 49 | ANNE | CRONYN | 2020-02-15 10:34:33+01 |

Note!

It's case-sensitive






SYNTAX

SELECT

*

FROM actor

WHERE first_name LIKE '%A%'

| | Data Output | Explain | Messages | Notifications |
|---|--|--|---|---|
| |  actor_id [PK] integer  | first_name text  | last_name text  | last_update timestamp with time zone  |
| 1 | 7 | GRACE | MOSTEL | 2020-02-15 10:34:33+01 |
| 2 | 8 | MATTHEW | JOHANSSON | 2020-02-15 10:34:33+01 |
| 3 | 10 | CHRISTIAN | GABLE | 2020-02-15 10:34:33+01 |






SYNTAX

SELECT

*

FROM actor

WHERE first_name LIKE '_A%'

| | Data Output | Explain | Messages | Notifications |
|---|--|--|---|---|
| |  actor_id [PK] integer  | first_name text  | last_name text  | last_update timestamp with time zone  |
| 1 | 8 | MATTHEW | JOHANSSON | 2020-02-15 10:34:33+01 |
| 2 | 12 | KARL | BERRY | 2020-02-15 10:34:33+01 |
| 3 | 18 | DAN | TORN | 2020-02-15 10:34:33+01 |
| 4 | 23 | SANDRA | KILMER | 2020-02-15 10:34:33+01 |






SYNTAX

SELECT

*

FROM actor

WHERE first_name LIKE '___A%'

| | Data Output | Explain | Messages | Notifications |
|---|--|--|---|---|
| |  actor_id [PK] integer  | first_name text  | last_name text  | last_update timestamp with time zone  |
| 1 | 7 | GRACE | MOSTEL | 2020-02-15 10:34:33+01 |
| 2 | 13 | UMA | WOOD | 2020-02-15 10:34:33+01 |
| 3 | 48 | FRANCES | DAY-LEWIS | 2020-02-15 10:34:33+01 |

SYNTAX

SELECT

*

FROM actor

WHERE first_name NOT LIKE '%A%'

| | Data Output | Explain | Messages | Notifications |
|---|---------------------------------|---------------------------|--------------------------|--|
| | actor_id [PK] integer | first_name text | last_name text | last_update timestamp with time zone |
| 1 | 1 | PENELOPE | GUINNESS | 2020-02-15 10:34:33+01 |
| 2 | 2 | NICK | WAHLBERG | 2020-02-15 10:34:33+01 |
| 3 | 3 | ED | CHASE | 2020-02-15 10:34:33+01 |

SYNTAX








SELECT

*

FROM payment

WHERE amount = 10.99

AND customer_id = 426

| Data Output | | Explain | Messages | Notifications | | |
|---|---|---|--|--|---|--|
|  | payment_id integer  | customer_id smallint  | staff_id smallint  | rental_id integer  | amount numeric (5,2)  | payment_date timestamp with time zone  |
| 1 | 26978 | 426 | 1 | 7527 | 10.99 | 2020-04-27 20:42:54.996577+02 |
| 2 | 26983 | 426 | 2 | 10172 | 10.99 | 2020-04-30 22:58:17.996577+02 |



Challenge

Challenge

You need to help the inventory manager to find out:

How many movies are there that contain the "Documentary" in the description?

Write a SQL query to get the answers!

Result

Data Output

| | count bigint |
|---|-----------------|
| 1 | 101 |

Challenge

How many customers are there with a first name that is 3 letters long and either an 'X' or a 'Y' as the last letter in the last name?

Write a SQL query to get the answers!

Result

| Data Output | | Expl |
|-------------|-----------------|------|
| | count bigint | |
| 1 | 3 | |

Commenting & Aliases

✓ **Comment to make code more readable & understandable**

✓ **Use**

--

Single line comment

✓ **Use**

```
/*  
[...] */
```

Multiple lines comment

Note!

Use comments to
explain your code!

SYNTAX

- 2020/07/01 by Nikolai
- Query that filters amount

SELECT

*

FROM payment

WHERE amount = 10.99

Note!

Comments will not be
processed as code!

SYNTAX

```
/* 2020/07/01 by Nikolai  
Query to filter by amount*/
```

```
SELECT
```

```
*
```

```
FROM payment
```

```
WHERE amount = 10.99
```

SYNTAX

SELECT

*

FROM payment

WHERE amount = 10.99

--AND customer_id = 426

SYNTAX

SELECT

*

FROM payment

--WHERE amount = 10.99

--AND customer_id = 426

SYNTAX

```
SELECT
```

```
*
```

```
FROM payment
```

```
/*WHERE amount = 10.99
```

```
AND customer_id = 426*/
```

SYNTAX

SELECT

payment_id AS invoice_no

FROM payment

| Data Output | | | Explain | Messages |
|-------------|-----------------------|-------------------------|---------|----------|
| | invoice_no integer | amount numeric (5,2) | | |
| 1 | 16050 | 1.99 | | |
| 2 | 16051 | 0.99 | | |
| 3 | 16052 | 6.99 | | |

SYNTAX

```
SELECT  
COUNT(*)  
FROM payment  
WHERE amount = 10.99  
AND customer_id = 426
```



Challenge
for today

Challenge

for today


1. **How many movies** are there that contain 'Saga' in the description and where the title starts either with 'A' or ends with 'R'?
Use the alias 'no_of_movies'.
2. **Create a list of all customers** where the first name contains 'ER' and has an 'A' as the second letter.
Order the results by the last name descendingly.
3. **How many payments** are there where the amount is either 0 or is between 3.99 and 7.99 and in the same time has happened on 2020-05-01.

Results

Result 1

| Data Output | | Explain |
|-------------|---------------------------|---------|
| | number_of_movie bigint | |
| 1 | 14 | |

Result 2

| Data Output | | Explain | Messages | Notifications | |
|---|-----------------------------|----------------------|--------------------|-------------------|---------------|
|  | customer_id [PK] integer | store_id smallint | first_name text | last_name text | email text |
| 1 | 61 | 2 | KATHERINE | RIVERA | KATHE |
| 2 | 339 | 2 | WALTER | PERRYMAN | WALTE |
| 3 | 535 | 1 | JAVIER | ELROD | JAVIER |
| 4 | 46 | 2 | CATHERINE | CAMPBELL | CATHE |
| 5 | 149 | 1 | VALERIE | BLACK | VALER |

Result 3

| Data Output | |
|-------------|-----------------|
| | count bigint |
| 1 | 27 |

Solution 1

1. How many movies are there that contain 'Saga' in the description and where the title starts either with 'A' or ends with 'R'?
Use the alias 'no_of_movies'.

```
SELECT  
COUNT(*) AS number_of_movie  
FROM film  
WHERE description LIKE '%Saga%'  
AND (title LIKE 'A%'  
OR title LIKE '%R')
```

Solution 2

2. Create a list of all customers where the first name contains 'ER' and has an 'A' as the second letter. Order the results by the last name descendingly.

```
SELECT
*
FROM customer
WHERE first_name LIKE '%ER%'
AND first_name LIKE '_A%'
ORDER BY last_name DESC
```

Solution 3

3. How many payments are there where the amount is either 0 or between 3.99 and 7.99 and in the same time have happened on 2020-05-01.

```
SELECT  
COUNT(*)  
FROM payment  
WHERE (amount = 0  
OR amount BETWEEN 3.99 AND 7.99)  
AND payment_date BETWEEN '2020-05-01' AND '2020-05-02'
```

Solution 2

4. How many distinct last names of the customers are there?

```
SELECT  
COUNT(DISTINCT last_name)  
FROM customer
```