

Создание БД

1. Создаем базу данных

```
CREATE DATABASE IF NOT EXISTS db_menu ENGINE = Atomic COMMENT 'DB Menu for Education'
```

2. Создаем таблицу

```
CREATE TABLE IF NOT EXISTS db_menu.menu_entity
(
    `id` UInt64,
    `created_at` DateTime DEFAULT now(),
    `created_at_date` DateTime DEFAULT toDate(created_at),
    `updated_at` DateTime DEFAULT now(),
    `category_of_food` LowCardinality(String) DEFAULT 'uncategorized',
    `updated_at_date` Date DEFAULT toDate(updated_at),
    `spetial_dish` Boolean DEFAULT false,
    `author` Nullable(String)
)
ENGINE = MergeTree
PARTITION BY created_at_date
ORDER BY id
```

3. Вставили данные в таблицу

```
insert into db_menu.menu_entity (id, created_at, category_of_food, spetial_dish) select *
from( select round(randUniform(1,100)) as id, toDateTime('2022-12-12 12:00:00') - (((12 +
randPoisson(64)) * 60) * 60) as created_at , 'desert' as category_of_food , false as spetial_dish
from numbers(100))
```

```
INSERT INTO db_menu.menu_entity (id, created_at, category_of_food, spetial_dish) SELECT *
FROM
(
    SELECT
        round(randUniform(1, 100)) AS id,
        toDateTime('2022-12-12 12:00:00') - (((12 + randPoisson(64)) * 60) * 60) AS created_at,
        'desert' AS category_of_food,
        false AS spetial_dish
    FROM numbers(100)
)
```

4. Получили запросом Select * from db_menu.menu_entity

```
5. Вставили еще кусочек данных insert into db_menu.menu_entity (id, created_at, category_of_food,
spetial_dish) select * from( select round(randUniform(1,100)) as id, toDateTime('2022-12-12
12:00:00') - (((12 + randPoisson(64)) * 60) * 60) as created_at , 'soup' as category_of_food ,
false as spetial_dish from numbers(100,1000))
```

6. Добавим поле isHot Boolean DEFAULT true COMMENT 'All dishes are better than they are hot!', ALTER TABLE db_menu.menu_entity

```
ADD COLUMN isHot Boolean DEFAULT true COMMENT 'All dishes are better than they are hot!';
```

7. Выберем последний созданный id и посчитаем их уникальное количество в разрезе категорий SELECT

```
    argMax(id, created_at) AS Last_created,
    countDistinct(id) AS amount,
    category_of_food
FROM db_menu.menu_entity
GROUP BY category_of_food
```

Query id: 0928d580-b570-4aa9-9c04-a1e23593cfde

	Last_created	amount	category_of_food
1.	21	59	desert
2.	68	100	soup

8. Удалим поле с признаком специального блюда

```
ALTER TABLE db_menu.menu_entity
```

```
DROP COLUMN spetial_dish;
```

9. Выберем 1000 строк из данных такси

```
SELECT *  
FROM gcs('https://storage.googleapis.com/clickhouse-public-datasets/nyc-taxi/trips_{0..2}.gz',  
'TabSeparatedWithNames')  
LIMIT 1000
```

10. Создаем таблицу и загружаем в нее данные

```
CREATE DATABASE nyc_taxi;
```

```
CREATE TABLE nyc_taxi.trips_small (  
    trip_id                UInt32,  
    pickup_datetime        DateTime,  
    dropoff_datetime       DateTime,  
    pickup_longitude      Nullable(Float64),  
    pickup_latitude        Nullable(Float64),  
    dropoff_longitude     Nullable(Float64),  
    dropoff_latitude       Nullable(Float64),  
    passenger_count        UInt8,  
    trip_distance          Float32,  
    fare_amount            Float32,  
    extra                  Float32,  
    tip_amount              Float32,  
    tolls_amount            Float32,  
    total_amount            Float32,  
    payment_type           Enum('CSH' = 1, 'CRE' = 2, 'NOC' = 3, 'DIS' = 4, 'UNK' = 5),  
    pickup_ntaname          LowCardinality(String),  
    dropoff_ntaname         LowCardinality(String)  
)  
ENGINE = MergeTree  
PRIMARY KEY (pickup_datetime, dropoff_datetime);  
INSERT INTO nyc_taxi.trips_small  
SELECT  
    trip_id,  
    pickup_datetime,  
    dropoff_datetime,  
    pickup_longitude,  
    pickup_latitude,  
    dropoff_longitude,  
    dropoff_latitude,  
    passenger_count,  
    trip_distance,  
    fare_amount,  
    extra,  
    tip_amount,  
    tolls_amount,  
    total_amount,  
    payment_type,  
    pickup_ntaname,  
    dropoff_ntaname  
FROM gcs(  
    'https://storage.googleapis.com/clickhouse-public-datasets/nyc-taxi/  
trips_{0..2}.gz',
```

```
'TabSeparatedWithNames'  
);
```

11. Смотрим количество созданных партиций

```
SELECT  
    name,  
    level,  
    rows  
FROM system.parts  
WHERE (database = 'nyc_taxi') AND (`table` = 'trips_small') AND active  
ORDER BY name ASC
```

Query id: c59120a1-8814-47d7-a52b-020d5adac963

	name	level	rows
1.	all_1_1_0	0	1111953
2.	all_2_2_0	0	1111953
3.	all_3_3_0	0	776411

3 rows in set. Elapsed: 0.003 sec.

12. Отключили и подключили таблицу с загруженными данными

```
detach table nyc_taxi.trips_small
```

```
DETACH TABLE nyc_taxi.trips_small
```

Query id: ab5f488c-49b4-4602-9608-6cf5584a83a

Ok.

0 rows in set. Elapsed: 0.002 sec.

```
clickhouse-node.ru-central1.internal :) select * from nyc_taxi.trips_small
```

```
SELECT *  
FROM nyc_taxi.trips_small
```

Query id: 8f397f4f-2cc3-41f6-8436-44be491c283b

Elapsed: 0.018 sec.

Received exception from server (version 25.3.5):

Code: 60. DB::Exception: Received from localhost:9000. DB::Exception: Unknown table expression identifier 'nyc_taxi.trips_small' in scope SELECT * FROM nyc_taxi.trips_small. (UNKNOWN_TABLE)

```
clickhouse-node.ru-central1.internal :) attach table nyc_taxi.trips_small
```

```
ATTACH TABLE nyc_taxi.trips_small
```

Query id: b34de589-0720-4477-80fc-b20e605c02fc

Ok.

0 rows in set. Elapsed: 0.008 sec.

```
clickhouse-node.ru-central1.internal :) select * from nyc_taxi.trips_small
```

```
SELECT *  
FROM nyc_taxi.trips_small
```

Query id: 28ce6fdc-4ff4-42a5-a416-908e0c733502

13. Удалили загруженную таблицу

```

clickhouse-node.ru-central1.internal :) ALTER TABLE db_menu.menu_entity
DROP COLUMN spetial_dish;

ALTER TABLE db_menu.menu_entity
(DROP COLUMN spetial_dish)

Query id: 50a7f231-0b94-4e93-a793-2351d81437c6
Ok.

0 rows in set. Elapsed: 0.095 sec.

[clickhouse-node.ru-central1.internal :) select * from db_menu.menu_entity limit 10

```

```

SELECT *
FROM db_menu.menu_entity
LIMIT 10

```

```

Query id: 2f119eb9-1526-4d80-9e98-588c833e34d3

```

id	created_at	created_at_date	updated_at	category_of_food	updated_at_date	author	isHot
1.	2 2022-12-08 21:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
2.	23 2022-12-08 21:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
3.	32 2022-12-08 19:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
4.	43 2022-12-08 07:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
5.	58 2022-12-08 21:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
6.	64 2022-12-08 23:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
7.	87 2022-12-08 20:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
8.	88 2022-12-08 20:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
9.	93 2022-12-08 21:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
10.	100 2022-12-08 23:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true

```

10 rows in set. Elapsed: 0.004 sec.

clickhouse-node.ru-central1.internal :)

```

ПуНКТ 1

```

clickhouse-node.ru-central1.internal :) CREATE TABLE IF NOT EXISTS db_menu.menu_entity
(
    id UInt64,
    created_at DateTime DEFAULT now(),
    created_at_date DateTime DEFAULT toDate(created_at),
    updated_at DateTime DEFAULT now(),
    category_of_food LowCardinality(String) DEFAULT 'uncategorized',
    updated_at_date Date DEFAULT toDate(updated_at),
    spetial_dish Boolean DEFAULT False,
    author Nullable(String)
)
ENGINE = MergeTree
PARTITION BY created_at_date
ORDER BY id;

```

```

CREATE TABLE IF NOT EXISTS db_menu.menu_entity
(
    `id` UInt64,
    `created_at` DateTime DEFAULT now(),
    `created_at_date` DateTime DEFAULT toDate(created_at),
    `updated_at` DateTime DEFAULT now(),
    `category_of_food` LowCardinality(String) DEFAULT 'uncategorized',
    `updated_at_date` Date DEFAULT toDate(updated_at),
    `spetial_dish` Boolean DEFAULT false,
    `author` Nullable(String)
)
ENGINE = MergeTree
PARTITION BY created_at_date
ORDER BY id

```

```

Query id: 95e6b427-89d3-463c-97d3-2248e5e1db7e

```

Ok.

0 rows in set. Elapsed: 0.026 sec.

```

clickhouse-node.ru-central1.internal :)

```

ПуНКТ 2

```

etc - yc-user@clickhouse-node: ~ -- ssh -i ~/yandex-cloud/key_ssh_id yc-user@158.160.46.166 - 202x41
clickhouse-node.ru-central1.internal : ) insert into db_menu.menu_entity (id, created_at, category_of_food, spetial_dish) select * from( select round(randUniform(1,100)) as id, toDate('2022-12-12 12:00:00') - ((12 + randPoisson(64)) * 60) * 60 as created_at , 'soup' as category_of_food , false as spetial_dish from numbers(100,1000)
)
INSERT INTO db_menu.menu_entity (id, created_at, category_of_food, spetial_dish) SELECT *
FROM
(
  SELECT
    round(randUniform(1, 100)) AS id,
    toDate('2022-12-12 12:00:00') - ((12 + randPoisson(64)) * 60) * 60 AS created_at,
    'soup' AS category_of_food,
    false AS spetial_dish
  FROM numbers(100, 1000)
)
Query id: 432621d0-edaa-4787-8146-0fa62e5f1c56
Ok.
0 rows in set. Elapsed: 0.010 sec. Processed 1.00 thousand rows, 8.00 KB (99.28 thousand rows/s., 794.25 KB/s.)
Peak memory usage: 6.52 MiB.

clickhouse-node.ru-central1.internal : ) select * from db_menu.menu_entity
SELECT *
FROM db_menu.menu_entity
Query id: 94c74deb-2dfd-44b7-937c-e8f402132211
+-----+-----+-----+-----+-----+-----+-----+-----+
| id   | created_at | created_at_date | updated_at | category_of_food | updated_at_date | spetial_dish | author |
+-----+-----+-----+-----+-----+-----+-----+-----+
1. 21 | 2022-12-10 06:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL
2. 14 | 2022-12-10 00:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
3. 18 | 2022-12-10 01:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
4. 31 | 2022-12-10 06:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
5. 34 | 2022-12-10 02:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
6. 36 | 2022-12-10 02:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
7. 36 | 2022-12-10 02:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
8. 39 | 2022-12-10 01:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
9. 40 | 2022-12-10 01:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
10. 48 | 2022-12-10 04:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
11. 54 | 2022-12-10 01:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
12. 56 | 2022-12-10 01:00:00 | 2022-12-10 00:00:00 | 2025-07-17 12:52:04 | soup | 2025-07-17 | false | NULL
+-----+-----+-----+-----+-----+-----+-----+-----+
Query id: f6adacbc-bdd6-4bc9-9287-692e25b2fb8f
Ok.
0 rows in set. Elapsed: 0.009 sec.

clickhouse-node.ru-central1.internal : ) select * from db_menu.menu_entity
SELECT *
FROM db_menu.menu_entity
Query id: 265a171f-af6f-413d-830c-d4c2884f11a1
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| id   | created_at | created_at_date | updated_at | category_of_food | updated_at_date | spetial_dish | author | isHot |
+-----+-----+-----+-----+-----+-----+-----+-----+
1. 4 | 2022-12-09 14:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
2. 13 | 2022-12-09 07:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
3. 15 | 2022-12-09 14:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
4. 15 | 2022-12-09 12:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
5. 16 | 2022-12-09 06:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
6. 16 | 2022-12-09 02:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
7. 17 | 2022-12-09 02:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
8. 19 | 2022-12-09 06:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
9. 20 | 2022-12-09 05:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
10. 21 | 2022-12-09 07:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
11. 24 | 2022-12-09 14:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
12. 25 | 2022-12-09 08:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
13. 25 | 2022-12-09 08:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
14. 26 | 2022-12-09 17:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
15. 27 | 2022-12-09 09:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
16. 28 | 2022-12-09 03:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
17. 28 | 2022-12-09 15:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
18. 29 | 2022-12-09 08:00:00 | 2022-12-09 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL | true
+-----+-----+-----+-----+-----+-----+-----+-----+

```

Пункт 6

```

clickhouse-node.ru-central1.internal : ) insert into db_menu.menu_entity[(id, created_at, category_of_food, spetial_dish)] select * from( select round(randUniform(1,100)) as id, toDate('2022-12-12 12:00:00') - ((12 + randPoisson(64)) * 60) * 60 as created_at , 'desert' as category_of_food , false as spetial_dish from numbers(100))
Syntax error: failed at position 32 ([]):
insert into db_menu.menu_entity[(id, created_at, category_of_food, spetial_dish)] select * from( select round(randUniform(1,100)) as id, toDate('2022-12-12 12:00:00') - ((12 + randPoisson(64)) * 60) * 60 as created_at , 'desert' as category_of_food , false as spetial_dish from numbers(100))
Expected one of: token, OpeningRoundBracket, FROM INFILE, SETTINGS, VALUES, FORMAT, SELECT, WITH
clickhouse-node.ru-central1.internal : ) insert into db_menu.menu_entity (id, created_at, category_of_food, spetial_dish) select * from( select round(randUniform(1,100)) as id, toDate('2022-12-12 12:00:00') - ((12 + randPoisson(64)) * 60) * 60 as created_at , 'desert' as category_of_food , false as spetial_dish from numbers(100))
)
INSERT INTO db_menu.menu_entity (id, created_at, category_of_food, spetial_dish) SELECT *
FROM
(
  SELECT
    round(randUniform(1, 100)) AS id,
    toDate('2022-12-12 12:00:00') - ((12 + randPoisson(64)) * 60) * 60 AS created_at,
    'desert' AS category_of_food,
    false AS spetial_dish
  FROM numbers(100)
)
Query id: 7216f96f-a1b5-4554-b240-f26e338c8614
Ok.
0 rows in set. Elapsed: 0.009 sec.

clickhouse-node.ru-central1.internal : ) select * from db_menu.menu_entity
SELECT *
FROM db_menu.menu_entity
Query id: edeffff9d-bc5e-4400-ae3-cd8edbedacb1
+-----+-----+-----+-----+-----+-----+-----+-----+
| id   | created_at | created_at_date | updated_at | category_of_food | updated_at_date | spetial_dish | author |
+-----+-----+-----+-----+-----+-----+-----+-----+
1. 2 | 2022-12-08 21:00:00 | 2022-12-08 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL
2. 23 | 2022-12-08 21:00:00 | 2022-12-08 00:00:00 | 2025-07-17 12:48:15 | desert | 2025-07-17 | false | NULL
+-----+-----+-----+-----+-----+-----+-----+-----+

```

Пункт 7

```
clickhouse-node.ru-central1.internal : ) ALTER TABLE db_menu.menu_entity
DROP COLUMN spetial_dish;

ALTER TABLE db_menu.menu_entity
(DROP COLUMN spetial_dish)

Query id: 50a7f231-0b94-4e93-a793-2351d81437c6

Ok.
```

```
[clickhouse-node.ru-central1.internal :) select * from db_menu.menu_entity limit 10
```

```
FROM db_menu.menu_entity  
LIMIT 10
```

id	created_at	created_at_date	updated_at	category_of_food	updated_at_date	author	isHot	
1.	2	2022-12-08 21:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
2.	23	2022-12-08 21:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
3.	32	2022-12-08 19:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
4.	43	2022-12-08 07:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
5.	58	2022-12-08 21:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
6.	64	2022-12-08 23:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
7.	87	2022-12-08 20:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
8.	88	2022-12-08 20:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
9.	93	2022-12-08 21:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true
10.	100	2022-12-08 23:00:00	2022-12-08 00:00:00	2025-07-17 12:48:15	desert	2025-07-17	NULL	true

10 rows in set. Elapsed: 0.004 sec.

```
clickhouse-node.ru-central1.internal :)
```

Пункт 8

Пункт 9

```
CREATE TABLE nyc_taxi.trips_small
(
    `trip_id` UInt32,
    `pickup_datetime` DateTime,
    `dropoff_datetime` DateTime,
    `pickup_longitude` Nullable(Float64),
    `pickup_latitude` Nullable(Float64),
    `dropoff_longitude` Nullable(Float64),
    `dropoff_latitude` Nullable(Float64),
    `passenger_count` UInt8,
    `trip_distance` Float32,
    `fare_amount` Float32,
    `extra` Float32,
    `tip_amount` Float32,
    `tolls_amount` Float32,
    `total_amount` Float32,
    `payment_type` Enum('CSH' = 1, 'CRE' = 2, 'NOC' = 3, 'DIS' = 4, 'UNK' = 5),
    `pickup_ntaname` LowCardinality(String),
    `dropoff_ntaname` LowCardinality(String)
)
ENGINE = MergeTree
PRIMARY KEY (pickup_datetime, dropoff_datetime)

Query id: c1082ffe-3beb-4270-88b3-6e80300c7521

Ok.

0 rows in set. Elapsed: 0.084 sec.

clickhouse-node ru-central1 internal:10000 TNSERT INTO nyc_taxi.trips_small
```

Mythic

```

clickhouse-node.ru-central1.internal :> INSERT INTO nyc_taxi.trips_small
SELECT
    trip_id,
    pickup_datetime,
    dropoff_datetime,
    pickup_longitude,
    pickup_latitude,
    dropoff_longitude,
    dropoff_latitude,
    passenger_count,
    trip_distance,
    fare_amount,
    extra,
    tip_amount,
    tolls_amount,
    total_amount,
    payment_type,
    pickup_ntaname,
    dropoff_ntaname
FROM gcs(
    'https://storage.googleapis.com/clickhouse-public-datasets/nyc-taxi/trips_{0..2}.gz',
    'TabSeparatedWithNames'
);

INSERT INTO nyc_taxi.trips_small SELECT
    trip_id,
    pickup_datetime,
    dropoff_datetime,
    pickup_longitude,
    pickup_latitude,
    dropoff_longitude,
    dropoff_latitude,
    passenger_count,
    trip_distance,
    fare_amount,
    extra,
    tip_amount,
    tolls_amount,
    total_amount,
    payment_type,
    pickup_ntaname,
    dropoff_ntaname
FROM gcs('https://storage.googleapis.com/clickhouse-public-datasets/nyc-taxi/trips_{0..2}.gz', 'TabSeparatedWithNames')

Query id: a15ffd61-d580-4194-8d9c-16b86a365e3f
Ok.

0 rows in set. Elapsed: 5.854 sec. Processed 3.00 million rows, 244.69 MB (512.54 thousand rows/s., 41.80 MB/s.)
Peak memory usage: 309.03 MiB.

clickhouse-node.ru-central1.internal :>

```

Пункт 10

```

SELECT
    name,
    level,
    rows
FROM system.parts
WHERE (database = 'nyc_taxi') AND (`table` = 'trips_small') AND active
ORDER BY name ASC

Query id: c59120a1-8814-47d7-a52b-020d5adac963

```

	<u>name</u>	<u>level</u>	<u>rows</u>
1.	all_1_1_0	0	1111953
2.	all_2_2_0	0	1111953
3.	all_3_3_0	0	776411

3 rows in set. Elapsed: 0.003 sec.

```
clickhouse-node.ru-central1.internal :>
```

Пункт 11

```

[clickhouse-node.ru-central1.internal :) detach table nyc_taxi.trips_small
DETACH TABLE nyc_taxi.trips_small
Query id: ab5f488c-49b4-4602-9608-6cfdf5584a83a
Ok.
0 rows in set. Elapsed: 0.002 sec.

[clickhouse-node.ru-central1.internal :) select * from nyc_taxi.trips_small
SELECT *
FROM nyc_taxi.trips_small
Query id: 8f397f4f-2cc3-41f6-8436-44be491c283b

Elapsed: 0.018 sec.

Received exception from server (version 25.3.5):
Code: 60. DB::Exception: Received from localhost:9000. DB::Exception: Unknown table expression identifier 'nyc_taxi.trips_small' in scope SELECT * FROM nyc_taxi.trips_small. (UNKNOWN_TABLE)

[clickhouse-node.ru-central1.internal :) attach table nyc_taxi.trips_small
ATTACH TABLE nyc_taxi.trips_small
Query id: b34de589-0720-4477-80fc-b20e605c02fc
Ok.
0 rows in set. Elapsed: 0.008 sec.

[clickhouse-node.ru-central1.internal :) select * from nyc_taxi.trips_small
SELECT *
FROM nyc_taxi.trips_small
Query id: 28ce6fdc-4ff4-42a5-a416-988e0c733582

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| trip_id | tip_amount | tolls_amount | total_amount | payment_type | pickup_ntaname | pickup_longitude | pickup_latitude | dropoff_longitude | dropoff_latitude | passenger_count | trip_distance | fare_amount | extra |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1. | 1212980580 | 0 | 0 | 10.8 | CRE | Murray Hill-Kips Bay | -73.9785385131836 | 40.744869232177734 | -74.0066689982831 | 40.74400329589844 | 5 | 2.03 | 9.5 | 0.
5 | 0 | 0 | 10.8 | CRE | Murray Hill-Kips Bay | Hudson Yards-Chelsea-Flatiron-Union Square | -73.95879364013672 | 40.815425872802734 | -73.93485260009766 | 40.85192108154297 | 3 | 3.17 | 12 | 0.
5 | 0 | 0 | 13.3 | CRE | Morningside Heights | Midtown-Midtown South | -73.97321319580078 | 40.76416778564453 | -73.8866195678711 | 40.757362365722656 | 1 | 5.1 | 20 | 0.
5 | 0 | 0 | 21.3 | CRE | Jackson Heights | North Side-South Side | -73.9565124517188 | 40.7169189453125 | -73.97987365722656 | 40.67742156982422 | 1 | 4.43 | 22 | 0.
5 | 0 | 0 | 23.3 | CRE | Park Slope-Gowanus | DUMBO-Vinegar Hill-Downtown Brooklyn-Boerum Hill | Williamsburg | -73.98802947998047 | 40.69620132446289 | -73.95646667480469 | 40.70244979853984 | 6 | 1.87 | 8 | 0.
5 | 1.86 | 0 | 11.16 | CSH | Upper East Side-Carnegie Hill | Clinton | -73.9637680053711 | 40.77445602416992 | -73.94477081298828 | 40.8884373474211 | 1 | 2.8 | 10 | 0.
5 | 0 | 0 | 11.3 | CRE | Central Harlem North-Polo Grounds | DUMBO-Vinegar Hill-Downtown Brooklyn-Boerum Hill | Hudson Yards-Chelsea-Flatiron-Union Square | -73.98817443847656 | 40.76442337036133 | -74.0051040649414 | 40.741363525398625 | 1 | 1.8 | 11 | 0.
5 | 2.45 | 0 | 14.75 | CSH | Bedford | -73.98284149169922 | 40.69358825683594 | -73.94754791259766 | 40.69554901123047 | 1 | 1.78 | 7.5 | 0.
5 | 0 | 0 | 8.8 | CRE | -73.99434661865234 | 40.76099107666016 | -73.99788665771484 | 40.7450027465203 | 1 | 1.4 | 8.5 | 0.
9. | 12085597174 | 2015-08-01 00:00:10 | 2015-08-01 00:10:40 | -73.99434661865234 | 40.76099107666016 | -73.99788665771484 | 40.7450027465203 |
```

Пункт 12

```

[clickhouse-node.ru-central1.internal :) drop table nyc_taxi.trips_small
DROP TABLE nyc_taxi.trips_small
Query id: cd1257a3-854c-4191-86e3-5bebd74d68bc
Ok.
0 rows in set. Elapsed: 0.002 sec.
```

Пункт 13