

Мутация данных и манипуляции с партициями

- Создаю таблицы, наполнил данными:

```
CREATE TABLE user_activity  
(  
    `user_id` UInt32,  
    `activity_type` String,  
    `activity_date` Date  
)  
ENGINE = MergeTree  
PARTITION BY toYYYYMM(activity_date)  
ORDER BY activity_date
```

```
insert into user_activity values  
(1, 'login', '2024-11-10'),  
(2, 'login', '2024-10-10'),  
(3, 'login', '2024-09-19'),  
(1, 'purchase', '2024-09-15'),  
(2, 'logout', '2024-10-08');
```

1.	user_id	activity_type	activity_date
	2	logout	2024-10-08
2.	2	login	2024-10-10
3.	user_id	activity_type	activity_date
	1	login	2024-11-10
4.	user_id	activity_type	activity_date
	1	purchase	2024-09-15
5.	3	login	2024-09-19

- Выполнил мутацию, проверил результат:

```
ALTER TABLE user_activity  
    (UPDATE activity_type = 'logout' WHERE (user_id = 2) AND  
    (activity_date = '2024-10-10'));
```

1.	user_id	activity_type	activity_date
2.	1	purchase	2024-09-15
	3	login	2024-09-19
3.	user_id	activity_type	activity_date
4.	2	logout	2024-10-08
	2	logout	2024-10-10
5.	user_id	activity_type	activity_date
	1	login	2024-11-10

```

SELECT
    event_type,
    merged_from,
    part_name,
    merge_reason
FROM system.part_log
WHERE `table` = 'user_activity'

```

	event_type	merged_from	part_name	merge_reason
1.	NewPart	[]	20241110_1_1_0	NotAMerge
2.	NewPart	[]	20241010_2_2_0	NotAMerge
3.	NewPart	[]	20240919_3_3_0	NotAMerge
4.	NewPart	[]	20240915_4_4_0	NotAMerge
5.	NewPart	[]	20241008_5_5_0	NotAMerge
6.	MutatePart	['20241008_5_5_0']	20241008_5_5_0_6	NotAMerge
7.	MutatePart	['20241110_1_1_0']	20241110_1_1_0_6	NotAMerge
8.	MutatePart	['20241010_2_2_0']	20241010_2_2_0_6	NotAMerge
9.	MutatePart	['20240919_3_3_0']	20240919_3_3_0_6	NotAMerge
10.	MutatePart	['20240915_4_4_0']	20240915_4_4_0_6	NotAMerge
11.	RemovePart	[]	20240915_4_4_0	NotAMerge
12.	RemovePart	[]	20240919_3_3_0	NotAMerge
13.	RemovePart	[]	20241008_5_5_0	NotAMerge
14.	RemovePart	[]	20241010_2_2_0	NotAMerge
15.	RemovePart	[]	20241110_1_1_0	NotAMerge
16.	NewPart	[]	202411_1_1_0	NotAMerge
17.	NewPart	[]	202410_2_2_0	NotAMerge
18.	NewPart	[]	202409_3_3_0	NotAMerge
19.	MutatePart	['202410_2_2_0']	202410_2_2_0_4	NotAMerge
20.	MutatePart	['202409_3_3_0']	202409_3_3_0_4	NotAMerge
21.	MutatePart	['202411_1_1_0']	202411_1_1_0_4	NotAMerge

Пересоздал таблицу, поэтому тут есть лишние записи.

- Удаляю партицию за сентябрь, проверил результат:

```
ALTER TABLE user_activity  
(DROP PARTITION '202409')
```

```
SELECT *  
FROM user_activity
```

	user_id	activity_type	activity_date
1.	2	logout	2024-10-08
2.	2	logout	2024-10-10
3.	1	login	2024-11-10