Руслан Касаткин, когорта 50_1 — 4-й спринт

Консоль

Задание 1
Команда или последовательность команд, которой удалось получить нужные логи:

grep -R "^233.201.*" ~/logs/2019/12

Логи:

233.201.188.154 - - [18/12/2019:21:46:01 +0000] "DELETE /events HTTP/1.1" 403 3971

233.201.182.9 - - [21/12/2019:21:56:20 +0000] "PATCH /users HTTP/1.1" 400 4118

Задание 2
Команды, которые создают директории bug1 и events:

mkdir bug1

mkdir events

Команда, которой выбираешь запросы за указанный период. Это те запросы, которыми ты отбираешь логи в файл main.txt:

grep -R "3./12/2019:21:3.:*" ~/logs/2019/12/ > ~/bug1/main.txt

Команды, которыми ты кладёшь логи в файлы 400.txt и 500.txt из main.txt:

grep " 400 " ~/bug1/main.txt > ~/bug1/events/400.txt

grep " 500 " ~/bug1/main.txt > ~/bug1/events/400.txt

400.txt

logs/2019/12/apache_2019-12-30.txt:80.57.170.51 - - [30/12/2019:21:35:12 +0000] "DELETE /users HTTP/1.1" 400 3623 logs/2019/12/apache_2019-12-30.txt:204.235.176.118 - - [30/12/2019:21:35:13 +0000] "POST /users HTTP/1.1" 400 4704 logs/2019/12/apache_2019-12-30.txt:82.95.203.67 - - [30/12/2019:21:35:19 +0000] "DELETE /lists HTTP/1.1" 400 3737 logs/2019/12/apache_2019-12-30.txt:155.242.215.46 - - [30/12/2019:21:35:38 +0000] "POST /playbooks HTTP/1.1" 400 4450

logs/2019/12/apache_2019-12-30.txt:189.176.85.0 - - [30/12/2019:21:35:39 +0000] "PATCH /alerts HTTP/1.1" 400 2732 logs/2019/12/apache_2019-12-30.txt:13.108.71.71 - - [30/12/2019:21:35:43 +0000] "PATCH /events HTTP/1.1" 400 3410 logs/2019/12/apache_2019-12-30.txt:195.213.133.182 - - [30/12/2019:21:35:46 +0000] "PUT /customers HTTP/1.1" 400 3085 logs/2019/12/apache_2019-12-30.txt:235.243.133.78 - - [30/12/2019:21:35:47 +0000] "PATCH /customers HTTP/1.1" 400 3264 logs/2019/12/apache_2019-12-30.txt:192.57.115.49 - - [30/12/2019:21:35:55 +0000] "POST /parsers HTTP/1.1" 400 2457 logs/2019/12/apache_2019-12-30.txt:71.0.49.244 - - [30/12/2019:21:35:55 +0000] "PUT /collectors HTTP/1.1" 400 2785 logs/2019/12/apache_2019-12-30.txt:224.159.206.126 - - [30/12/2019:21:36:02 +0000] "DELETE /customers HTTP/1.1" 400 4569 logs/2019/12/apache_2019-12-30.txt:131.35.106.246 - - [30/12/2019:21:36:04 +0000] "DELETE /lists HTTP/1.1" 400 2578 logs/2019/12/apache_2019-12-30.txt:216.24.42.208 - - [30/12/2019:21:36:06 +0000] "GET /parsers HTTP/1.1" 400 4597 logs/2019/12/apache_2019-12-30.txt:123.53.150.160 - - [30/12/2019:21:37:19 +0000] "PATCH /events HTTP/1.1" 400 4379 logs/2019/12/apache_2019-12-30.txt:61.129.127.103 - - [30/12/2019:21:37:32 +0000] "GET /lists HTTP/1.1" 400 2575 logs/2019/12/apache_2019-12-30.txt:90.216.4.78 - - [30/12/2019:21:37:34 +0000] "PATCH /lists HTTP/1.1" 400 3899 logs/2019/12/apache_2019-12-30.txt:204.250.214.208 - - [30/12/2019:21:37:36 +0000] "PATCH /parsers HTTP/1.1" 400 4742 logs/2019/12/apache_2019-12-30.txt:79.214.240.98 - - [30/12/2019:21:37:37 +0000] "POST /fieldsets HTTP/1.1" 400 4441 logs/2019/12/apache_2019-12-30.txt:65.47.42.12 - - [30/12/2019:21:37:39 +0000] "PATCH /customers HTTP/1.1" 400 2500 logs/2019/12/apache_2019-12-30.txt:251.118.141.34 - - [30/12/2019:21:37:41 +0000] "POST /customers HTTP/1.1" 400 3519 logs/2019/12/apache_2019-12-30.txt:205.20.166.196 - - [30/12/2019:21:37:51 +0000] "POST /users HTTP/1.1" 400 4032 logs/2019/12/apache_2019-12-30.txt:156.217.3.46 - - [30/12/2019:21:37:52 +0000] "PATCH /parsers HTTP/1.1" 400 2020 logs/2019/12/apache_2019-12-30.txt:48.240.198.167 - - [30/12/2019:21:37:57 +0000] "PATCH /playbooks HTTP/1.1" 400 4100 logs/2019/12/apache_2019-12-30.txt:101.255.159.211 - - [30/12/2019:21:37:59 +0000] "GET /auth HTTP/1.1" 400 2324 logs/2019/12/apache_2019-12-30.txt:80.76.98.203 - - [30/12/2019:21:38:00 +0000] "POST /playbooks HTTP/1.1" 400 3045 logs/2019/12/apache_2019-12-30.txt:85.64.63.255 - - [30/12/2019:21:38:13 +0000] "PATCH /collectors HTTP/1.1" 400 2291 logs/2019/12/apache_2019-12-30.txt:184.79.247.161 - - [30/12/2019:21:38:13 +0000] "PUT /alerts HTTP/1.1" 400 3557 logs/2019/12/apache_2019-12-30.txt:93.2.134.22 - - [30/12/2019:21:39:39 +0000] "DELETE /alerts HTTP/1.1" 400 3701 logs/2019/12/apache_2019-12-31.txt:86.34.86.182 - - [31/12/2019:21:35:10 +0000] "POST /auth HTTP/1.1" 400 3626 logs/2019/12/apache_2019-12-31.txt:167.37.16.117 - - [31/12/2019:21:35:17 +0000] "PATCH /customers HTTP/1.1" 400 3294 logs/2019/12/apache_2019-12-31.txt:199.128.92.19 - - [31/12/2019:21:35:43 +0000] "PUT /users HTTP/1.1" 400 4180 logs/2019/12/apache_2019-12-31.txt:162.152.99.143 - - [31/12/2019:21:35:59 +0000] "PUT /users HTTP/1.1" 400 4606 logs/2019/12/apache_2019-12-31.txt:83.115.59.224 - - [31/12/2019:21:37:26 +0000] "GET /alerts HTTP/1.1" 400 3489 logs/2019/12/apache_2019-12-31.txt:194.10.97.226 - - [31/12/2019:21:37:31 +0000] "DELETE /lists HTTP/1.1" 400 2447 logs/2019/12/apache_2019-12-31.txt:180.99.214.40 - - [31/12/2019:21:37:44 +0000]

"DELETE /alerts HTTP/1.1" 400 2077 logs/2019/12/apache_2019-12-31.txt:154.152.205.4 - - [31/12/2019:21:37:50 +0000] "GET /playbooks HTTP/1.1" 400 3324 logs/2019/12/apache_2019-12-31.txt:197.82.125.54 - - [31/12/2019:21:37:52 +0000] "PUT /fieldsets HTTP/1.1" 400 4365 logs/2019/12/apache_2019-12-31.txt:115.89.87.219 - - [31/12/2019:21:38:06 +0000] "PUT /playbooks HTTP/1.1" 400 2589 logs/2019/12/apache_2019-12-31.txt:100.77.15.14 - - [31/12/2019:21:38:07 +0000] "GET /fieldsets HTTP/1.1" 400 4911 logs/2019/12/apache_2019-12-31.txt:22.33.159.242 - - [31/12/2019:21:38:07 +0000] "GET /playbooks HTTP/1.1" 400 3955 logs/2019/12/apache_2019-12-31.txt:149.148.229.11 - - [31/12/2019:21:39:16 +0000] "GET /users HTTP/1.1" 400 2071 logs/2019/12/apache_2019-12-31.txt:236.107.64.192 - - [31/12/2019:21:39:17 +0000] "PATCH /users HTTP/1.1" 400 2791 logs/2019/12/apache_2019-12-31.txt:24.156.105.39 - - [31/12/2019:21:39:23 +0000] "GET /lists HTTP/1.1" 400 2902 logs/2019/12/apache_2019-12-31.txt:193.50.164.254 - - [31/12/2019:21:39:23 +0000] "PUT /playbooks HTTP/1.1" 400 3296 logs/2019/12/apache_2019-12-31.txt:18.123.104.91 - - [31/12/2019:21:39:52 +0000] "GET /collectors HTTP/1.1" 400 4372 logs/2019/12/apache_2019-12-31.txt:234.218.148.4 - - [31/12/2019:21:39:54 +0000] "PUT /users HTTP/1.1" 400 2509

500.txt.

logs/2019/12/apache_2019-12-30.txt:64.250.112.189 - - [30/12/2019:21:35:13 +0000] "PUT /parsers HTTP/1.1" 500 4639 logs/2019/12/apache_2019-12-30.txt:193.253.101.180 - - [30/12/2019:21:35:31 +0000] "PATCH /alerts HTTP/1.1" 500 2944 logs/2019/12/apache_2019-12-30.txt:197.106.117.194 - - [30/12/2019:21:35:31 +0000] "PATCH /parsers HTTP/1.1" 500 3519 logs/2019/12/apache_2019-12-30.txt:247.124.71.67 - - [30/12/2019:21:35:45 +0000] "PUT /alerts HTTP/1.1" 500 2746 logs/2019/12/apache_2019-12-30.txt:62.88.204.119 - - [30/12/2019:21:35:51 +0000] "PUT /auth HTTP/1.1" 500 2666 logs/2019/12/apache_2019-12-30.txt:125.156.142.26 - - [30/12/2019:21:36:01 +0000] "PATCH /events HTTP/1.1" 500 3460 logs/2019/12/apache_2019-12-30.txt:144.170.212.70 - - [30/12/2019:21:36:04 +0000] "DELETE /parsers HTTP/1.1" 500 2599 logs/2019/12/apache_2019-12-30.txt:59.39.200.252 - - [30/12/2019:21:36:05 +0000] "GET /alerts HTTP/1.1" 500 2650 logs/2019/12/apache_2019-12-30.txt:150.136.200.100 - - [30/12/2019:21:37:24 +0000] "POST /lists HTTP/1.1" 500 2684 logs/2019/12/apache_2019-12-30.txt:84.81.25.45 - - [30/12/2019:21:37:25 +0000] "POST /auth HTTP/1.1" 500 2052 logs/2019/12/apache_2019-12-30.txt:30.222.160.141 - - [30/12/2019:21:37:30 +0000] "PATCH /parsers HTTP/1.1" 500 2017 logs/2019/12/apache_2019-12-30.txt:117.87.158.36 - - [30/12/2019:21:37:34 +0000] "POST /fieldsets HTTP/1.1" 500 4056 logs/2019/12/apache_2019-12-30.txt:212.153.128.212 - - [30/12/2019:21:37:42 +0000] "PUT /fieldsets HTTP/1.1" 500 3259 logs/2019/12/apache_2019-12-30.txt:58.188.83.217 - - [30/12/2019:21:37:46 +0000] "POST /playbooks HTTP/1.1" 500 3947 logs/2019/12/apache_2019-12-30.txt:193.123.131.146 - - [30/12/2019:21:37:47 +0000] "PUT /lists HTTP/1.1" 500 3902 logs/2019/12/apache_2019-12-30.txt:182.7.179.91 - - [30/12/2019:21:37:48 +0000] "GET /users HTTP/1.1" 500 2950 logs/2019/12/apache_2019-12-30.txt:10.25.168.164 - - [30/12/2019:21:38:05 +0000] "PATCH /playbooks HTTP/1.1" 500 3858 logs/2019/12/apache_2019-12-30.txt:215.201.210.173 - - [30/12/2019:21:38:11 +0000]

"PATCH /customers HTTP/1.1" 500 3277 logs/2019/12/apache_2019-12-30.txt:179.241.103.167 - - [30/12/2019:21:39:23 +0000] "POST /lists HTTP/1.1" 500 3669 logs/2019/12/apache_2019-12-30.txt:147.188.170.252 - - [30/12/2019:21:39:33 +0000] "POST /fieldsets HTTP/1.1" 500 3313 logs/2019/12/apache_2019-12-30.txt:1.249.123.189 - - [30/12/2019:21:39:36 +0000] "PATCH /alerts HTTP/1.1" 500 4734 logs/2019/12/apache_2019-12-30.txt:124.114.135.105 - - [30/12/2019:21:39:41 +0000] "PATCH /customers HTTP/1.1" 500 3348 logs/2019/12/apache_2019-12-30.txt:35.215.100.202 - - [30/12/2019:21:39:43 +0000] "PUT /alerts HTTP/1.1" 500 4345 logs/2019/12/apache_2019-12-30.txt:86.222.23.128 - - [30/12/2019:21:39:44 +0000] "PATCH /alerts HTTP/1.1" 500 2230 logs/2019/12/apache_2019-12-30.txt:20.161.75.95 - - [30/12/2019:21:39:48 +0000] "DELETE /users HTTP/1.1" 500 2412 logs/2019/12/apache_2019-12-30.txt:196.18.151.117 - - [30/12/2019:21:39:55 +0000] "PUT /events HTTP/1.1" 500 4439 logs/2019/12/apache_2019-12-30.txt:77.101.138.151 - - [30/12/2019:21:39:57 +0000] "PUT /lists HTTP/1.1" 500 2194 logs/2019/12/apache_2019-12-31.txt:208.205.133.127 - - [31/12/2019:21:35:17 +0000] "DELETE /alerts HTTP/1.1" 500 4561 logs/2019/12/apache_2019-12-31.txt:20.145.255.91 - - [31/12/2019:21:35:30 +0000] "GET /parsers HTTP/1.1" 500 3051 logs/2019/12/apache_2019-12-31.txt:91.66.134.13 - - [31/12/2019:21:35:53 +0000] "POST /lists HTTP/1.1" 500 3319 logs/2019/12/apache_2019-12-31.txt:31.88.211.206 - - [31/12/2019:21:35:57 +0000] "DELETE /events HTTP/1.1" 500 2325 logs/2019/12/apache_2019-12-31.txt:171.37.114.114 - - [31/12/2019:21:37:39 +0000] "DELETE /fieldsets HTTP/1.1" 500 3253 logs/2019/12/apache_2019-12-31.txt:223.157.242.167 - - [31/12/2019:21:37:59 +0000] "POST /users HTTP/1.1" 500 2283 logs/2019/12/apache_2019-12-31.txt:98.181.102.34 - - [31/12/2019:21:38:06 +0000] "PATCH /fieldsets HTTP/1.1" 500 4672 logs/2019/12/apache_2019-12-31.txt:254.74.22.79 - - [31/12/2019:21:38:06 +0000] "PUT /lists HTTP/1.1" 500 2259 logs/2019/12/apache_2019-12-31.txt:103.46.238.3 - - [31/12/2019:21:38:09 +0000] "PUT /lists HTTP/1.1" 500 3992 logs/2019/12/apache_2019-12-31.txt:41.62.205.107 - - [31/12/2019:21:39:20 +0000] "PATCH /alerts HTTP/1.1" 500 3631 logs/2019/12/apache_2019-12-31.txt:22.53.105.197 - - [31/12/2019:21:39:31 +0000] "DELETE /collectors HTTP/1.1" 500 4202 logs/2019/12/apache_2019-12-31.txt:178.22.133.42 - - [31/12/2019:21:39:43 +0000] "PUT /alerts HTTP/1.1" 500 4648 logs/2019/12/apache_2019-12-31.txt:102.247.13.50 - - [31/12/2019:21:39:55 +0000] "PATCH /auth HTTP/1.1" 500 3736

База данных

Задание 1
Число автомобилей:
5529

Запрос, которым тебе удалось решить задачу.
SELECT COUNT(*) AS cabs_mach FROM cabs;

Задание 2

Список компаний с числом автомобилей меньше 100.

```
 cnt |            company_name
-----+--------------------------------------------
  97 | Nova Taxi Affiliation Llc
  89 | Patriot Taxi Dba Peace Taxi Associat
  85 | Blue Diamond
  81 | Checker Taxi Affiliation
  80 | Chicago Medallion Management
  69 | Chicago Independents
  67 | 24 Seven Taxi
  60 | Checker Taxi
  55 | American United
  53 | Chicago Medallion Leasing INC
  49 | Top Cab Affiliation
  48 | KOAM Taxi Association
  38 | Chicago Taxicab
  34 | Norshore Cab
  20 | Gold Coast Taxi
  20 | Metro Group
  18 | Service Taxi Association
  14 | 5 Star Taxi
   8 | American United Taxi Affiliation
   8 | Metro Jet Taxi A
   7 | Setare Inc
   5 | Leonard Cab Co
   1 | 4615 - 83503 Tyrone Henderson
   1 | 5062 - 34841 Sam Mestas
   1 | 4623 - 27290 Jay Kim
   1 | 5997 - 65283 AW Services Inc.
   1 | 2092 - 61288 Sbeih company
   1 | 1469 - 64126 Omar Jada
   1 | 2733 - 74600 Benny Jona
   1 | 2192 - 73487 Zeymane Corp
   1 | 5006 - 39261 Salifu Bawa
   1 | 3556 - 36214 RC Andrews Cab
```

```
   1 | 3721 - Santamaria Express, Alvaro Santamaria
   1 | 2809 - 95474 C & D Cab Co Inc.
   1 | 2241 - 44667 - Felman Corp, Manuel Alonso
   1 | 3620 - 52292 David K. Cab Corp.
   1 | 2823 - 73307 Lee Express Inc
   1 | 6057 - 24657 Richard Addo
   1 | 6742 - 83735 Tasha ride inc
   1 | 1085 - 72312 N and W Cab Co
   1 | 3591 - 63480 Chuks Cab
   1 | 0118 - 42111 Godfrey S.Awir
   1 | 6574 - Babylon Express Inc.
   1 | 3094 - 24059 G.L.B. Cab Co
   1 | 5874 - 73628 Sergey Cab Corp.
   1 | 6743 - 78771 Luhak Corp
   1 | 5074 - 54002 Ahzmi Inc
   1 | 3623 - 72222 Arrington Enterprises
   1 | 4053 - 40193 Adwar H. Nikola
   1 | Chicago Star Taxicab
   1 | 3011 - 66308 JBL Cab Inc.
(51 rows)
```

Запрос, которым тебе удалось решить задачу.

SELECT company_name AS company_name, COUNT(cab_id) AS cnt FROM cabs GROUP BY company_name HAVING COUNT (cab_id) < 100 ORDER BY cnt DESC;

Задание 3

Таблица с данными за указанный период.

```
        ts          | weather_conditions
--------------------+--------------------
 2017-11-05 00:00:00 | Good
 2017-11-05 01:00:00 | Bad
 2017-11-05 02:00:00 | Good
 2017-11-05 03:00:00 | Good
 2017-11-05 04:00:00 | Bad
 2017-11-05 05:00:00 | Bad
 2017-11-05 06:00:00 | Good
 2017-11-05 07:00:00 | Good
 2017-11-05 08:00:00 | Good
 2017-11-05 09:00:00 | Good
 2017-11-05 10:00:00 | Good
 2017-11-05 11:00:00 | Good
```

```
2017-11-05 12:00:00 | Good
2017-11-05 13:00:00 | Good
2017-11-05 14:00:00 | Bad
2017-11-05 15:00:00 | Good
2017-11-05 16:00:00 | Bad
2017-11-05 17:00:00 | Good
2017-11-05 18:00:00 | Bad
2017-11-05 19:00:00 | Bad
2017-11-05 20:00:00 | Bad
2017-11-05 21:00:00 | Good
2017-11-05 22:00:00 | Good
2017-11-05 23:00:00 | Good
2017-11-06 00:00:00 | Good
(25 rows)
```

Запрос, которым удалось решить задачу.

SELECT ts AS ts, description AS weather_condition, CASE WHEN description LIKE '%rain%' OR description LIKE '%storm%' THEN 'bad' ELSE 'good' END FROM weather_records WHERE '2017-11-05 00:00' <= ts AND ts <= '2017-11-06 00:00';

Задание 4

Таблица с данными за указанный период.

```
company_name                | trips_amount
----------------------------------------+--------------
 Flash Cab                   |     19558
 Taxi Affiliation Services   |     11422
 Medallion Leasin            |     10367
 Yellow Cab                  |      9888
 Taxi Affiliation Service Yellow |      9299
 Chicago Carriage Cab Corp   |      9181
 City Service                |      8448
 Sun Taxi                    |      7701
 Star North Management LLC   |      7455
 Blue Ribbon Taxi Association Inc. |    5953
 Choice Taxi Association      |      5015
 Globe Taxi                  |      4383
 Dispatch Taxi Affiliation   |      3355
 Nova Taxi Affiliation Llc   |      3175
 Patriot Taxi Dba Peace Taxi Associat |    2235
 Checker Taxi Affiliation    |      2216
 Blue Diamond                |      2070
 Chicago Medallion Management |      1955
 24 Seven Taxi               |      1775
```

```
Chicago Medallion Leasing INC              |       1607
Checker Taxi                               |       1486
American United                           |       1404
Chicago Independents                      |       1296
KOAM Taxi Association                     |       1259
Chicago Taxicab                           |       1014
Top Cab Affiliation                       |        978
Gold Coast Taxi                           |        428
Service Taxi Association                  |        402
5 Star Taxi                               |        310
303 Taxi                                  |        250
Setare Inc                                |        230
American United Taxi Affiliation          |        210
Leonard Cab Co                            |        147
Metro Jet Taxi A                          |        146
Norshore Cab                              |        127
6742 - 83735 Tasha ride inc               |         39
3591 - 63480 Chuks Cab                    |         37
1469 - 64126 Omar Jada                    |         36
6743 - 78771 Luhak Corp                   |         33
0118 - 42111 Godfrey S.Awir               |         33
6574 - Babylon Express Inc.               |         31
Chicago Star Taxicab                      |         29
1085 - 72312 N and W Cab Co               |         29
2809 - 95474 C & D Cab Co Inc.            |         29
2092 - 61288 Sbeih company                |         27
3011 - 66308 JBL Cab Inc.                 |         25
3620 - 52292 David K. Cab Corp.           |         21
4615 - 83503 Tyrone Henderson             |         21
3623 - 72222 Arrington Enterprises        |         20
5074 - 54002 Ahzmi Inc                    |         16
2823 - 73307 Lee Express Inc              |         15
4623 - 27290 Jay Kim                      |         15
3721 - Santamaria Express, Alvaro Santamaria |    14
5006 - 39261 Salifu Bawa                  |         14
2192 - 73487 Zeymane Corp                 |         14
6057 - 24657 Richard Addo                 |         13
5997 - 65283 AW Services Inc.             |         12
Metro Group                               |         11
5062 - 34841 Sam Mestas                   |          8
4053 - 40193 Adwar H. Nikola              |          7
2733 - 74600 Benny Jona                   |          7
5874 - 73628 Sergey Cab Corp.             |          5
2241 - 44667 - Felman Corp, Manuel Alonso |          3
3556 - 36214 RC Andrews Cab               |          2
(64 rows)
```

Запрос, которым удалось решить задачу.

```
SELECT company_name AS company_name, COUNT(trips.cab_id) AS trips_amount
FROM trips INNER JOIN cabs ON cabs.cab_id = trips.cab_id WHERE start_ts >=
'2017-11-15 00:00' AND start_ts <= '2017-11-16 23:59' GROUP BY company_name
ORDER BY trips_amount DESC;
```