Задание 1

**Команда или последовательность команд, которой удалось получить нужные логи.**

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

**Логи:**

/home/morty/logs/2019/12/apache\_2019-12-18.txt:233.201.188.154 - - [18/12/2019:21:46:01 +0000] "DELETE /events HTTP/1.1" 403 3971

/home/morty/logs/2019/12/apache\_2019-12-21.txt: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

cd bug1

bug1$ mkdir events

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

grep "3[01]/12/2019:21:3." logs/2019/12/apache\_2019-12-3\*.txt > main.txt

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

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

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

Задание 3

**Число автомобилей**

5529

**Запрос, которым тебе удалось решить задачу.**

chicago\_taxi=# SELECT count(cab\_id) as cnt FROM cabs;

cnt

------

5529

(1 row)

Задание 4

**Список компаний с числом автомобилей меньше 100.**

company\_name | cnt

----------------------------------------------+-----

Nova Taxi Affiliation Llc | 97

Patriot Taxi Dba Peace Taxi Associat | 89

Blue Diamond | 85

Checker Taxi Affiliation | 81

Chicago Medallion Management | 80

Chicago Independents | 69

24 Seven Taxi | 67

Checker Taxi | 60

American United | 55

Chicago Medallion Leasing INC | 53

Top Cab Affiliation | 49

KOAM Taxi Association | 48

Chicago Taxicab | 38

Norshore Cab | 34

Gold Coast Taxi | 20

Metro Group | 20

Service Taxi Association | 18

5 Star Taxi | 14

American United Taxi Affiliation | 8

Metro Jet Taxi A | 8

Setare Inc | 7

Leonard Cab Co | 5

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. | 1

(51 rows)

**Запрос, которым тебе удалось решить задачу.**

chicago\_taxi=# SELECT company\_name, COUNT(cab\_id) as cnt FROM cabs

chicago\_taxi-# GROUP BY company\_name

chicago\_taxi-# HAVING COUNT(cab\_id) < 100

chicago\_taxi-# ORDER BY COUNT(cab\_id) DESC;

**Задание 5**

**Полученная 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,

CASE WHEN description LIKE '%rain%' OR description LIKE '%storm%' THEN 'Bad'

ELSE 'Good' END AS weather\_conditions

FROM weather\_records

WHERE (ts :: timestamp) BETWEEN '2017-11-05 00:00' and '2017-11-06 00:00';

|  |
| --- |
|  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Задание 6

**Полученная 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

cabs.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 CAST(trips.start\_ts AS date) BETWEEN '2017-11-15' AND '2017-11-16'

GROUP BY company\_name

ORDER BY trips\_amount DESC;