# **Консоль**

## Задание 1

Команда или последовательность команд, которой удалось получить нужные логи:

**grep -Rn '^233.201.' ~/logs/2019/12**

Логи:

/home/morty/logs/2019/12/apache\_2019-12-18.txt:329:233.201.188.154 - - [18/12/20

19:21:46:01 +0000] "DELETE /events HTTP/1.1" 403 3971

/home/morty/logs/2019/12/apache\_2019-12-21.txt:752:233.201.182.9 - - [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 bug1/events**

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

**grep "3./12/2019:21:3.:.." ~/logs/2019/12/apache\_2019-12-3\*.txt > ~/bug1/main.txt**

**или 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/500.txt**

*400.txt*

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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*

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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

/home/morty/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\_cnt

**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** **count**(cab\_id) **AS** cnt,

company\_name **AS** company\_name

**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,

**CASE**

**WHEN** description **like** '%rain%'

**OR** description **like** '%storm%' **THEN** 'Bad'

**ELSE** 'Good'

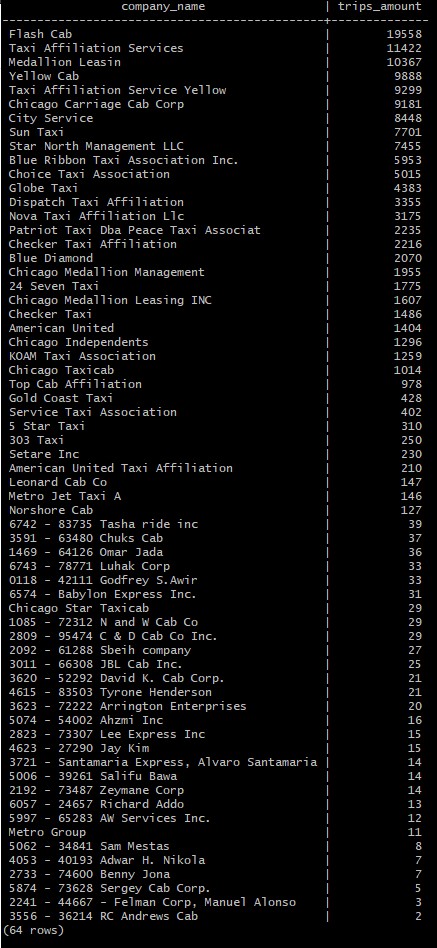
**END** **AS** weather\_conditions

**FROM** weather\_records

**WHERE** **cast**(ts **AS** **TIMESTAMP**) **BETWEEN** '2017-11-05 00:00' **AND** '2017-11-06 00:00';

## Задание 4

Таблица с данными за указанный период.



Запрос, которым удалось решить задачу.

**SELECT** cabs.company\_name **AS** company\_name,

**count**(trips.trip\_id) **AS** trips\_amount

**FROM** cabs

**INNER** **JOIN** trips **ON** trips.cab\_id = cabs.cab\_id

**WHERE** **cast**(trips.start\_ts **AS** **TIMESTAMP**) >='2017-11-15 00:00:00'

**AND** **cast**(trips.start\_ts **AS** **TIMESTAMP**) <'2017-11-17 00:00:00'

**GROUP** **BY** company\_name

**ORDER** **BY** trips\_amount **DESC**;