

Консоль

Задание 1

Команда или последовательность команд, которой удалось получить нужные логи: `grep`
`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
mkdir events
```

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

```
grep -h "21:3" ~/logs/2019/12/apache_2019-12-30.txt >>~/bug1/main.txt
```

```
grep -h "21:3" ~/logs/2019/12/apache_2019-12-31.txt >>~/bug1/main.txt
```

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

```
grep -h ' 400 ' main.txt >> 400.txt
```

```
grep -h ' 500 ' main.txt >> 500.txt
```

`400.txt`

```
80.57.170.51 - - [30/12/2019:21:35:12 +0000] "DELETE /users HTTP/1.1" 400 3623
```

```
204.235.176.118 - - [30/12/2019:21:35:13 +0000] "POST /users HTTP/1.1" 400 4704
```

```
82.95.203.67 - - [30/12/2019:21:35:19 +0000] "DELETE /lists HTTP/1.1" 400 3737
```

```
155.242.215.46 - - [30/12/2019:21:35:38 +0000] "POST /playbooks HTTP/1.1" 400 4450
```

```
189.176.85.0 - - [30/12/2019:21:35:39 +0000] "PATCH /alerts HTTP/1.1" 400 2732
```

```
13.108.71.71 - - [30/12/2019:21:35:43 +0000] "PATCH /events HTTP/1.1" 400 3410
```

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

83.115.59.224 - - [31/12/2019:21:37:26 +0000] "GET /alerts HTTP/1.1" 400 3489
194.10.97.226 - - [31/12/2019:21:37:31 +0000] "DELETE /lists HTTP/1.1" 400 2447
180.99.214.40 - - [31/12/2019:21:37:44 +0000] "DELETE /alerts HTTP/1.1" 400 2077
154.152.205.4 - - [31/12/2019:21:37:50 +0000] "GET /playbooks HTTP/1.1" 400 3324
197.82.125.54 - - [31/12/2019:21:37:52 +0000] "PUT /fieldsets HTTP/1.1" 400 4365
115.89.87.219 - - [31/12/2019:21:38:06 +0000] "PUT /playbooks HTTP/1.1" 400 2589
100.77.15.14 - - [31/12/2019:21:38:07 +0000] "GET /fieldsets HTTP/1.1" 400 4911
22.33.159.242 - - [31/12/2019:21:38:07 +0000] "GET /playbooks HTTP/1.1" 400 3955
149.148.229.11 - - [31/12/2019:21:39:16 +0000] "GET /users HTTP/1.1" 400 2071
236.107.64.192 - - [31/12/2019:21:39:17 +0000] "PATCH /users HTTP/1.1" 400 2791
24.156.105.39 - - [31/12/2019:21:39:23 +0000] "GET /lists HTTP/1.1" 400 2902
193.50.164.254 - - [31/12/2019:21:39:23 +0000] "PUT /playbooks HTTP/1.1" 400 3296
18.123.104.91 - - [31/12/2019:21:39:52 +0000] "GET /collectors HTTP/1.1" 400 4372
234.218.148.4 - - [31/12/2019:21:39:54 +0000] "PUT /users HTTP/1.1" 400 2509
500.txt.
64.250.112.189 - - [30/12/2019:21:35:13 +0000] "PUT /parsers HTTP/1.1" 500 4639
193.253.101.180 - - [30/12/2019:21:35:31 +0000] "PATCH /alerts HTTP/1.1" 500 2944
197.106.117.194 - - [30/12/2019:21:35:31 +0000] "PATCH /parsers HTTP/1.1" 500 3519
247.124.71.67 - - [30/12/2019:21:35:45 +0000] "PUT /alerts HTTP/1.1" 500 2746
62.88.204.119 - - [30/12/2019:21:35:51 +0000] "PUT /auth HTTP/1.1" 500 2666
125.156.142.26 - - [30/12/2019:21:36:01 +0000] "PATCH /events HTTP/1.1" 500 3460
144.170.212.70 - - [30/12/2019:21:36:04 +0000] "DELETE /parsers HTTP/1.1" 500 2599
59.39.200.252 - - [30/12/2019:21:36:05 +0000] "GET /alerts HTTP/1.1" 500 2650
150.136.200.100 - - [30/12/2019:21:37:24 +0000] "POST /lists HTTP/1.1" 500 2684
84.81.25.45 - - [30/12/2019:21:37:25 +0000] "POST /auth HTTP/1.1" 500 2052
30.222.160.141 - - [30/12/2019:21:37:30 +0000] "PATCH /parsers HTTP/1.1" 500 2017
117.87.158.36 - - [30/12/2019:21:37:34 +0000] "POST /fieldsets HTTP/1.1" 500 4056

212.153.128.212 - - [30/12/2019:21:37:42 +0000] "PUT /fieldsets HTTP/1.1" 500 3259
58.188.83.217 - - [30/12/2019:21:37:46 +0000] "POST /playbooks HTTP/1.1" 500 3947
193.123.131.146 - - [30/12/2019:21:37:47 +0000] "PUT /lists HTTP/1.1" 500 3902
182.7.179.91 - - [30/12/2019:21:37:48 +0000] "GET /users HTTP/1.1" 500 2950
10.25.168.164 - - [30/12/2019:21:38:05 +0000] "PATCH /playbooks HTTP/1.1" 500 3858
215.201.210.173 - - [30/12/2019:21:38:11 +0000] "PATCH /customers HTTP/1.1" 500 3277
179.241.103.167 - - [30/12/2019:21:39:23 +0000] "POST /lists HTTP/1.1" 500 3669
147.188.170.252 - - [30/12/2019:21:39:33 +0000] "POST /fieldsets HTTP/1.1" 500 3313
1.249.123.189 - - [30/12/2019:21:39:36 +0000] "PATCH /alerts HTTP/1.1" 500 4734
124.114.135.105 - - [30/12/2019:21:39:41 +0000] "PATCH /customers HTTP/1.1" 500 3348
35.215.100.202 - - [30/12/2019:21:39:43 +0000] "PUT /alerts HTTP/1.1" 500 4345
86.222.23.128 - - [30/12/2019:21:39:44 +0000] "PATCH /alerts HTTP/1.1" 500 2230
20.161.75.95 - - [30/12/2019:21:39:48 +0000] "DELETE /users HTTP/1.1" 500 2412
196.18.151.117 - - [30/12/2019:21:39:55 +0000] "PUT /events HTTP/1.1" 500 4439
77.101.138.151 - - [30/12/2019:21:39:57 +0000] "PUT /lists HTTP/1.1" 500 2194
64.250.112.189 - - [30/12/2019:21:35:13 +0000] "PUT /parsers HTTP/1.1" 500 4639
193.253.101.180 - - [30/12/2019:21:35:31 +0000] "PATCH /alerts HTTP/1.1" 500 2944
197.106.117.194 - - [30/12/2019:21:35:31 +0000] "PATCH /parsers HTTP/1.1" 500 3519
247.124.71.67 - - [30/12/2019:21:35:45 +0000] "PUT /alerts HTTP/1.1" 500 2746
62.88.204.119 - - [30/12/2019:21:35:51 +0000] "PUT /auth HTTP/1.1" 500 2666
125.156.142.26 - - [30/12/2019:21:36:01 +0000] "PATCH /events HTTP/1.1" 500 3460
144.170.212.70 - - [30/12/2019:21:36:04 +0000] "DELETE /parsers HTTP/1.1" 500 2599
59.39.200.252 - - [30/12/2019:21:36:05 +0000] "GET /alerts HTTP/1.1" 500 2650
150.136.200.100 - - [30/12/2019:21:37:24 +0000] "POST /lists HTTP/1.1" 500 2684
84.81.25.45 - - [30/12/2019:21:37:25 +0000] "POST /auth HTTP/1.1" 500 2052
30.222.160.141 - - [30/12/2019:21:37:30 +0000] "PATCH /parsers HTTP/1.1" 500 2017

117.87.158.36 - - [30/12/2019:21:37:34 +0000] "POST /fieldsets HTTP/1.1" 500 4056
212.153.128.212 - - [30/12/2019:21:37:42 +0000] "PUT /fieldsets HTTP/1.1" 500 3259
58.188.83.217 - - [30/12/2019:21:37:46 +0000] "POST /playbooks HTTP/1.1" 500 3947
193.123.131.146 - - [30/12/2019:21:37:47 +0000] "PUT /lists HTTP/1.1" 500 3902
182.7.179.91 - - [30/12/2019:21:37:48 +0000] "GET /users HTTP/1.1" 500 2950
10.25.168.164 - - [30/12/2019:21:38:05 +0000] "PATCH /playbooks HTTP/1.1" 500 3858
215.201.210.173 - - [30/12/2019:21:38:11 +0000] "PATCH /customers HTTP/1.1" 500 3277
179.241.103.167 - - [30/12/2019:21:39:23 +0000] "POST /lists HTTP/1.1" 500 3669
147.188.170.252 - - [30/12/2019:21:39:33 +0000] "POST /fieldsets HTTP/1.1" 500 3313
1.249.123.189 - - [30/12/2019:21:39:36 +0000] "PATCH /alerts HTTP/1.1" 500 4734
124.114.135.105 - - [30/12/2019:21:39:41 +0000] "PATCH /customers HTTP/1.1" 500 3348
35.215.100.202 - - [30/12/2019:21:39:43 +0000] "PUT /alerts HTTP/1.1" 500 4345
86.222.23.128 - - [30/12/2019:21:39:44 +0000] "PATCH /alerts HTTP/1.1" 500 2230
20.161.75.95 - - [30/12/2019:21:39:48 +0000] "DELETE /users HTTP/1.1" 500 2412
196.18.151.117 - - [30/12/2019:21:39:55 +0000] "PUT /events HTTP/1.1" 500 4439
77.101.138.151 - - [30/12/2019:21:39:57 +0000] "PUT /lists HTTP/1.1" 500 2194
208.205.133.127 - - [31/12/2019:21:35:17 +0000] "DELETE /alerts HTTP/1.1" 500 4561
20.145.255.91 - - [31/12/2019:21:35:30 +0000] "GET /parsers HTTP/1.1" 500 3051
91.66.134.13 - - [31/12/2019:21:35:53 +0000] "POST /lists HTTP/1.1" 500 3319
31.88.211.206 - - [31/12/2019:21:35:57 +0000] "DELETE /events HTTP/1.1" 500 2325
171.37.114.114 - - [31/12/2019:21:37:39 +0000] "DELETE /fieldsets HTTP/1.1" 500 3253
223.157.242.167 - - [31/12/2019:21:37:59 +0000] "POST /users HTTP/1.1" 500 2283
98.181.102.34 - - [31/12/2019:21:38:06 +0000] "PATCH /fieldsets HTTP/1.1" 500 4672
254.74.22.79 - - [31/12/2019:21:38:06 +0000] "PUT /lists HTTP/1.1" 500 2259
103.46.238.3 - - [31/12/2019:21:38:09 +0000] "PUT /lists HTTP/1.1" 500 3992
41.62.205.107 - - [31/12/2019:21:39:20 +0000] "PATCH /alerts HTTP/1.1" 500 3631

22.53.105.197 - - [31/12/2019:21:39:31 +0000] "DELETE /collectors HTTP/1.1" 500 4202

178.22.133.42 - - [31/12/2019:21:39:43 +0000] "PUT /alerts HTTP/1.1" 500 4648

102.247.13.50 - - [31/12/2019:21:39:55 +0000] "PATCH /auth HTTP/1.1" 500 3736

База данных

Задание1

Число автомобилей:

5529

Запрос, которым тебе удалось решить задачу.

```
select count(cab_id) as cnt from cabs;
```

```
chicago_taxi=# select count(cab_id) as cnt from cabs;
 cnt
-----
 5529
(1 row)
```

Задание 2

Список компаний с числом автомобилей меньше 100.

51

company	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 as company, count(*) as cnt from cabs group by company_name having count(*) < 100 order by count(*) desc ; (сортировка по убыванию)

Задание 3

Таблица с данными за указанный период.

```
You are now connected to database "chicago_taxi" as user "morty".
chicago_taxi=# SELECT ts, CASE WHEN description LIKE '%rain%' OR description LIKE '%storm%' T
HEN 'Bad' ELSE 'Good' END AS weather_conditions FROM weather_records WHERE ts BETWEEN '2017-1
1-05' AND '2017-11-06';
```

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 BETWEEN '2017-11-05' AND '2017-11-06';
```


Задание 4

Таблица с данными за указанный период.

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)	
(END)	

Запрос, которым удалось решить задачу.

```
SELECT cabs.company_name as company,count(cabs.company_name) as trips_amount
FROM cabs INNER JOIN trips on trips.cab_id = cabs.cab_id WHERE start_ts::date between
'2017-11-15' and '2017-11-16' GROUP BY cabs.company_name ORDER BY trips_amount
desc; (Сортировка сделана как сказано в задании по trips_amount)
```