

Консоль

Задание 1

```
$ cd /home/morty/logs/2019/12  
$ 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 21:3. /home/morty/logs/2019/12/apache_2019-12-30.txt > main.txt
```

```
$ grep 21:3. /home/morty/logs/2019/12/apache_2019-12-31.txt >> main.txt
```

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

```
grep " 400 " /home/morty/bug1/main.txt > /home/morty/bug1/events/400.txt
```

```
grep " 500 " /home/morty/bug1/main.txt > /home/morty/bug1/events/500.txt
```

400.txt

```
$ cat /home/morty/bug1/events/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.

\$ cat /home/morty/bug1/events/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
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

Задание 1

Число автомобилей:

5529

Запрос, которым тебе удалось решить задачу.

```
SELECT COUNT(*) AS cnt FROM cabs;
```

Задание 2

Список компаний с числом автомобилей меньше 100.

97 | Nova Taxi Affiliation Llc

89 | Patriot Taxi Dbа 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.

Запрос, которым тебе удалось решить задачу.

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

Задание 3

Таблица с данными за указанный период.

morty@cc7f5129a2c1: ~

description	ts	weather_conditions
mist	2017-11-05 00:00:00	good
moderate rain	2017-11-05 01:00:00	bad
fog	2017-11-05 02:00:00	good
fog	2017-11-05 03:00:00	good
light rain	2017-11-05 04:00:00	bad
moderate rain	2017-11-05 05:00:00	bad
fog	2017-11-05 06:00:00	good
fog	2017-11-05 07:00:00	good
light intensity drizzle	2017-11-05 08:00:00	good
fog	2017-11-05 09:00:00	good
fog	2017-11-05 10:00:00	good
fog	2017-11-05 11:00:00	good
fog	2017-11-05 12:00:00	good
drizzle	2017-11-05 13:00:00	good
moderate rain	2017-11-05 14:00:00	bad
fog	2017-11-05 15:00:00	good
proximity thunderstorm	2017-11-05 16:00:00	bad
light intensity drizzle	2017-11-05 17:00:00	good
proximity thunderstorm with rain	2017-11-05 18:00:00	bad
proximity thunderstorm	2017-11-05 19:00:00	bad
light rain	2017-11-05 20:00:00	bad
mist	2017-11-05 21:00:00	good
mist	2017-11-05 22:00:00	good
overcast clouds	2017-11-05 23:00:00	good
overcast clouds	2017-11-06 00:00:00	good
(25 rows)		

Запрос, которым удалось решить задачу.

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

Задание 4

Таблица с данными за указанный период.

Flash Cab		19951
Taxi Affiliation Services		11675
Medallion Leasin		10489
Yellow Cab		10112
Taxi Affiliation Service Yellow		9451
Chicago Carriage Cab Corp		9286
City Service		8556
Sun Taxi		7786
Star North Management LLC		7604
Blue Ribbon Taxi Association Inc.		6090
Choice Taxi Association		5086
Globe Taxi		4456
Dispatch Taxi Affiliation		3404
Nova Taxi Affiliation Llc		3230
Patriot Taxi Dbа Peace Taxi Associat		2254
Checker Taxi Affiliation		2228
Blue Diamond		2089
Chicago Medallion Management		1990
24 Seven Taxi		1780
Chicago Medallion Leasing INC		1623
Checker Taxi		1523
American United		1440

Chicago Independents		1300
KOAM Taxi Association		1293
Chicago Taxicab		1019
Top Cab Affiliation		996
Gold Coast Taxi		430
Service Taxi Association		402
5 Star Taxi		313
303 Taxi		252
Setare Inc		232
American United Taxi Affiliation		213
Leonard Cab Co		153
Metro Jet Taxi A		147
Norshore Cab		127
6742 - 83735 Tasha ride inc		39
3591 - 63480 Chuks Cab		37
1469 - 64126 Omar Jada		36
6743 - 78771 Luhak Corp		34
0118 - 42111 Godfrey S.Awir		33
6574 - Babylon Express Inc.		31
2809 - 95474 C & D Cab Co Inc.		30
1085 - 72312 N and W Cab Co		30
Chicago Star Taxicab		29
3011 - 66308 JBL Cab Inc.		28
2092 - 61288 Sbeih company		27
3620 - 52292 David K. Cab Corp.		21
4615 - 83503 Tyrone Henderson		21

3623 - 72222 Arrington Enterprises		20
5074 - 54002 Ahzmi Inc		16
4623 - 27290 Jay Kim		15
2823 - 73307 Lee Express Inc		15
5006 - 39261 Salifu Bawa		14
2192 - 73487 Zeymane Corp		14
3 6057 - 24657 Richard Addo		13
5997 - 65283 AW Services Inc.		12
4053 - 40193 Adwar H. Nikola		11
Metro Group		11
5062 - 34841 Sam Mestas		9
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(*) AS trips_amount FROM
cabs INNER JOIN trips ON cabs.cab_id = trips.cab_id WHERE start_ts BETWEEN
'2017-11-15' AND '2017-11-16' GROUP BY company_name ORDER BY trips_amount
DESC;
```