

Консоль

Задание 1

Команда или последовательность команд, которой удалось получить нужные логи:

```
*grep -r "233.201." ~/logs/2019/12/*.txt
```

Логи:\

- 1) 233.201.188.154 - - [18/12/2019:21:46:01 +0000] "DELETE /events HTTP/1.1" 403 3971
- 2) 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 -R "3[0-1]/12/2019:21:3:[0-59]" ~/logs/2019/12 > ~/bug1/main.txt
```

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

```
grep -w "400" ~/bug1/main.txt > ~/bug1/events/400.txt
```

```
grep -w "500" ~/bug1/main.txt > ~/bug1/events/500.txt
```

400.txt

*Текст файла

```
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
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

500.txt.

*Текст файла

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

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

База данных

Задание 1

Число автомобилей:

5529

Запрос, которым тебе удалось решить задачу.

```
SELECT COUNT(Cab_id) AS "Number_of_cars"
```

```
FROM cabs;
```

Или

```
SELECT COUNT(vehicle_id) AS "Number_of_Vehicle"
```

```
FROM cabs;
```

Задание 2

Список компаний с числом автомобилей меньше 100.

cnt	company_name
-----+-----	

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.

(51 rows)

Запрос, которым тебе удалось решить задачу.

```
SELECT COUNT(vehicle_id) AS cnt, company_name  
FROM cabs  
GROUP BY company_name  
HAVING COUNT(vehicle_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

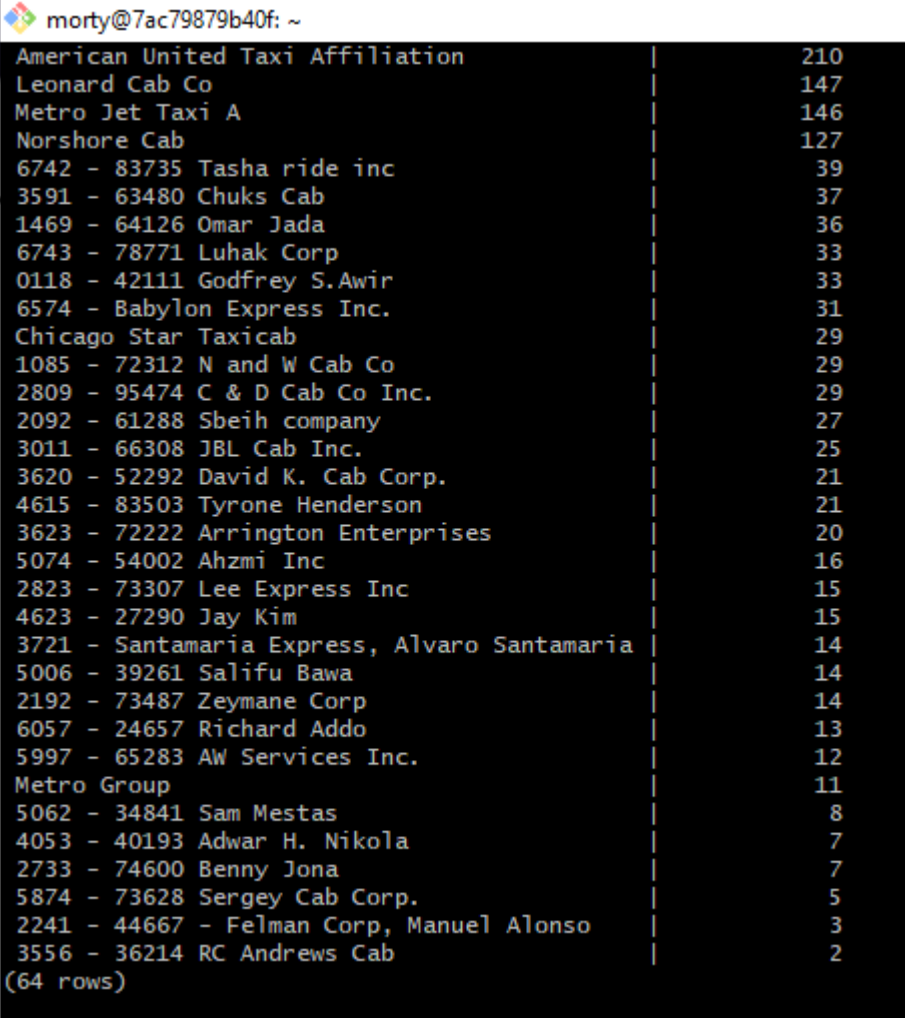
(25 rows)

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) >= '2017-11-05 00:00:00' AND CAST(ts AS  
TIMESTAMP) <= '2017-11-06 00:00:00';
```

Задание 4

Таблица с данными за указанный период.



```
morty@7ac79879b40f: ~
```

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;

