**Александр Дельцов**

# **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 - - [18/12/2019:21:46:01 +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:

**cd ~**

**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 -w "400" bug1/main.txt > bug1/events/400.txt**

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

Команды, которыми ты кладёшь логи в файлы 400.txt и 500.txt из main.txt:  
**grep -hR "3./12/2019:21:3.:.." ~/logs/2019/12/ > bug1/main.txt**

400.txt **=> cat bug1/events/400.txt**  
**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. **=> cat bug1/events/500.txt**

**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 - \c chicago\_taxi

Число автомобилей:  
**cab\_cnt**

**---------**

**5529**

**(1 row)**

Запрос, которым тебе удалось решить задачу.  
**SELECT COUNT (\*) AS cab\_cnt FROM cabs;**

## Задание 2 - \c chicago\_taxi

Список компаний с числом автомобилей меньше 100.

**cnt | combpany\_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 combpany\_name FROM cabs GROUP BY company\_name HAVING COUNT(cab\_id) < 100 ORDER BY cnt DESC;**

## Задание 3 - \c chicago\_taxi

Таблица с данными за указанный период.

**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\_description 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 - \c chicago\_taxi

Таблица с данными за указанный период.



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 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;**