Елена Разина, 36а когорта, 4-й спринт

# **Консоль**

## Задание 1

Команда или последовательность команд, которой удалось получить нужные логи:

morty@fb4599af28c8:~$ cd logs/2019/12

morty@fb4599af28c8:~/logs/2019/12$ ls

apache\_2019-12-01.txt apache\_2019-12-12.txt apache\_2019-12-23.txt

apache\_2019-12-02.txt apache\_2019-12-13.txt apache\_2019-12-24.txt

apache\_2019-12-03.txt apache\_2019-12-14.txt apache\_2019-12-25.txt

apache\_2019-12-04.txt apache\_2019-12-15.txt apache\_2019-12-26.txt

apache\_2019-12-05.txt apache\_2019-12-16.txt apache\_2019-12-27.txt

apache\_2019-12-06.txt apache\_2019-12-17.txt apache\_2019-12-28.txt

apache\_2019-12-07.txt apache\_2019-12-18.txt apache\_2019-12-29.txt

apache\_2019-12-08.txt apache\_2019-12-19.txt apache\_2019-12-30.txt

apache\_2019-12-09.txt apache\_2019-12-20.txt apache\_2019-12-31.txt

apache\_2019-12-10.txt apache\_2019-12-21.txt

apache\_2019-12-11.txt apache\_2019-12-22.txt

morty@66ff65c4cc55:~/logs/2019/12$ grep -R "^233.201." ~/logs/2019/12

/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

morty@66ff65c4cc55:~/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:

morty@a3f19d2ab0b0:~$ mkdir bug1

morty@a3f19d2ab0b0:~$ cd bug1

morty@a3f19d2ab0b0:~/bug1$ touch main.txt

morty@a3f19d2ab0b0:~/bug1$ ls

main.txt

morty@a3f19d2ab0b0:~/bug1$

morty@a3f19d2ab0b0:~/bug1$ mkdir events

morty@a3f19d2ab0b0:~/bug1$ cd events

morty@a3f19d2ab0b0:~/bug1/events$ touch 400.txt 500.txt

morty@a3f19d2ab0b0:~/bug1/events$ ls

400.txt 500.txt

morty@a3f19d2ab0b0:~/bug1/events$

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

morty@a3f19d2ab0b0:~$ cat ~/logs/2019/12/apache\_2019-12-30.txt >> ~/bug1/main.txt

morty@a3f19d2ab0b0:~$ cd bug1

morty@a3f19d2ab0b0:~/bug1$ ls

events main.txt

morty@a3f19d2ab0b0:~/bug1$ nano main.txt

В редакторе nano комбинацией Ctrl+K удалить все строки, где время более 21:39:59 и сохранить.

**Другой способ:**

morty@01d9fbc7ad20:~/logs/2019/12$ grep :21:3 ~/logs/2019/12/apache\_2019-12-30.txt > ~/bug1/main.txt

morty@66ff65c4cc55:~/logs/2019/12$ grep :21:3 ~/logs/2019/12/apache\_2019-12-31.txt >> ~/bug1/main.txt

morty@01d9fbc7ad20:~/logs/2019/12$ cd ../../..

morty@01d9fbc7ad20:~$ cd bug1

morty@01d9fbc7ad20:~/bug1$ nano main.txt

B файле будут только те строки, где время с 21:30:00 до 21:39:59.

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

400.txt

morty@01d9fbc7ad20:~/bug1$ grep " 400 " ~/bug1/main.txt > ~/bug1/events/400.txt

morty@01d9fbc7ad20:~/bug1$ cd events

morty@01d9fbc7ad20:~/bug1/events$ nano 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

morty@66ff65c4cc55:~/bug1$ grep " 500 " ~/bug1/main.txt > ~/bug1/events/500.txt

morty@66ff65c4cc55:~/bug1$ cd events

morty@66ff65c4cc55:~/bug1/events$ nano 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:  
5500

Запрос, которым тебе удалось решить задачу.

chicago\_taxi=# SELECT COUNT(DISTINCT vehicle\_id) AS vehicle\_uniq\_cnt FROM cabs;

vehicle\_uniq\_cnt

------------------

5500

(1 row)

## Задание 2

Список компаний с числом автомобилей меньше 100.

company\_name | 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

0118 - 42111 Godfrey S.Awir | 1

1085 - 72312 N and W Cab Co | 1

1469 - 64126 Omar Jada | 1

2092 - 61288 Sbeih company | 1

2192 - 73487 Zeymane Corp | 1

2241 - 44667 - Felman Corp, Manuel Alonso | 1

2733 - 74600 Benny Jona | 1

2809 - 95474 C & D Cab Co Inc. | 1

2823 - 73307 Lee Express Inc | 1

3011 - 66308 JBL Cab Inc. | 1

3094 - 24059 G.L.B. Cab Co | 1

3556 - 36214 RC Andrews Cab | 1

3591 - 63480 Chuks Cab | 1

3620 - 52292 David K. Cab Corp. | 1

3623 - 72222 Arrington Enterprises | 1

3721 - Santamaria Express, Alvaro Santamaria | 1

4053 - 40193 Adwar H. Nikola | 1

4615 - 83503 Tyrone Henderson | 1

4623 - 27290 Jay Kim | 1

5006 - 39261 Salifu Bawa | 1

5062 - 34841 Sam Mestas | 1

5074 - 54002 Ahzmi Inc | 1

5874 - 73628 Sergey Cab Corp. | 1

5997 - 65283 AW Services Inc. | 1

6057 - 24657 Richard Addo | 1

6574 - Babylon Express Inc. | 1

6742 - 83735 Tasha ride inc | 1

6743 - 78771 Luhak Corp | 1

Chicago Star Taxicab | 1

(51 rows)

Запрос, которым тебе удалось решить задачу.

chicago\_taxi=# SELECT DISTINCT company\_name AS company\_name, COUNT(vehicle\_id) AS cnt 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.

chicago\_taxi=# 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 00:00:00' AND '2017-11-06 00:00:00';

## Задание 4

Таблица с данными за указанный период.

company\_name | trips\_amount

----------------------------------------------+--------------

Flash Cab | 19558

Taxi Affiliation Services | 11422

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

0118 - 42111 Godfrey S.Awir | 33

6743 - 78771 Luhak Corp | 33

6574 - Babylon Express Inc. | 31

1085 - 72312 N and W Cab Co | 29

2809 - 95474 C & D Cab Co Inc. | 29

Chicago Star Taxicab | 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

2192 - 73487 Zeymane Corp | 14

3721 - Santamaria Express, Alvaro Santamaria | 14

5006 - 39261 Salifu Bawa | 14

6057 - 24657 Richard Addo | 13

5997 - 65283 AW Services Inc. | 12

Metro Group | 11

5062 - 34841 Sam Mestas | 8

2733 - 74600 Benny Jona | 7

4053 - 40193 Adwar H. Nikola | 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(trips.trip\_id) AS trips\_amount FROM cabs INNER JOIN trips ON trips.cab\_id=cabs.cab\_id WHERE trips.start\_ts BETWEEN '2017-11-15 00:00:00' AND '2017-11-16 23:59:59' GROUP BY company\_name ORDER BY trips\_amount DESC;