Задание 1

Команда, с помощью которой удалось получить нужные логи:

morty@bda921c60e93:~$ 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:

morty@bda921c60e93:~$ mkdir bug1

morty@bda921c60e93:~/bug1$ mkdir events

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

morty@bda921c60e93:~/bug1$ grep "21:3.:" ~/logs/2019/12/apache\_2019-12-30.txt > main.txt

morty@bda921c60e93:~/bug1$ grep "21:3.:" ~/logs/2019/12/apache\_2019-12-31.txt >> main.txt

Команды, для перемещения логов в файлы 400.txt и 500.txt из main.txt.

morty@bda921c60e93:~/bug1$ grep &apos;3[01]/12/2019:21:3.\*?\*400 ....$&apos; ~/bug1/main.txt > ~/bug1/events/400.txt

 morty@bda921c60e93:~/bug1$ grep &apos;3[01]/12/2019:21:3.\*?\*500 ....$&apos; ~/bug1/main.txt > ~/bug1/events/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

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

Задание 3

Число автомобилей: 5529

Запрос, которым тебе удалось решить задачу:

SELECT COUNT (cab\_id) FROM cabs;

Задание 4

Список компаний с числом автомобилей меньше 100:

cnt |                 company\_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.

Запрос, которым тебе удалось решить задачу:

chicago\_taxi=# SELECT Count (cab\_id) AS cnt, company\_name FROM cabs GROUP BY company\_name HAVING Count (cab\_id) < 100 ORDER BY cnt DESC;

Задание 5

Полученная 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

Запрос, которым удалось решить задачу:

chicago\_taxi=# SELECT ts, CASE WHEN description LIKE &apos;%rain%&apos; OR description LIKE &apos;%storm%&apos; THEN &apos;Bad&apos; ELSE &apos;Good&apos; END AS weather\_conditions FROM weather\_records WHERE ts BETWEEN &apos;2017-11-05 00:00:00&apos; AND &apos;2017-11-06 00:00:00&apos;;

Задание 6

Полученная 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

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

Запрос, которым удалось решить задачу:

chicago\_taxi=# SELECT cabs.company\_name AS company\_name, COUNT (trips.trip\_id) AS trips\_amount FROM trips INNER JOIN cabs ON cabs.cab\_id = trips.cab\_id WHERE trips.start\_ts >= '2017-11-15 00:00' and trips.start\_ts < '2017-11-17 00:00' GROUP BY company\_name ORDER BY trips\_amount DESC;