Задание 1

Команда или последовательность команд, которой удалось получить нужные логи.

$ grep -R "^233.201.[0-9]\*.[0-9]\*" ~/logs/2019/12

Логи:

/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

Задание 2

Команды, которые создают директории bug1 и events.

$ mkdir ~/bug1 ~/bug1/events

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

grep "21:30\*" ~/logs/2019/12/apache\_2019-12-30.txt ~/logs/2019/12/apache\_2019-12-31.txt > bug1/main.txt

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

grep -E '(^|\s)'400'($|\s)' ~/bug1/main.txt > bug1/events/400.txt

grep -E '(^|\s)'500'($|\s)' ~/bug1/main.txt > bug1/events/500.txt

или так

$ grep “ 500” ~/bug1/main.txt > bug1/events/500.txt

$ grep ' 400' ~/bug1/main.txt > bug1/events/400.txt

400.txt

GNU nano 3.2 400.txt

/home/morty/logs/2019/12/apache\_2019-12-30.txt:101.255.159.211 - - [30/12/2019:21:37:59 +0000] "GET /auth HTTP/1.1" 400 2324

/home/morty/logs/2019/12/apache\_2019-12-30.txt:80.76.98.203 - - [30/12/2019:21:38:00 +0000] "POST /playbooks HTTP/1.1" 400 3045

/home/morty/logs/2019/12/apache\_2019-12-30.txt:85.64.63.255 - - [30/12/2019:21:38:13 +0000] "PATCH /collectors HTTP/1.1" 400 2291

/home/morty/logs/2019/12/apache\_2019-12-30.txt:184.79.247.161 - - [30/12/2019:21:38:13 +0000] "PUT /alerts HTTP/1.1" 400 3557

/home/morty/logs/2019/12/apache\_2019-12-30.txt:93.2.134.22 - - [30/12/2019:21:39:39 +0000] "DELETE /alerts HTTP/1.1" 400 3701

/home/morty/logs/2019/12/apache\_2019-12-31.txt:86.34.86.182 - - [31/12/2019:21:35:10 +0000] "POST /auth HTTP/1.1" 400 3626

/home/morty/logs/2019/12/apache\_2019-12-31.txt:167.37.16.117 - - [31/12/2019:21:35:17 +0000] "PATCH /customers HTTP/1.1" 400 3294

/home/morty/logs/2019/12/apache\_2019-12-31.txt:199.128.92.19 - - [31/12/2019:21:35:43 +0000] "PUT /users HTTP/1.1" 400 4180

/home/morty/logs/2019/12/apache\_2019-12-31.txt:162.152.99.143 - - [31/12/2019:21:35:59 +0000] "PUT /users HTTP/1.1" 400 4606

/home/morty/logs/2019/12/apache\_2019-12-31.txt:83.115.59.224 - - [31/12/2019:21:37:26 +0000] "GET /alerts HTTP/1.1" 400 3489

/home/morty/logs/2019/12/apache\_2019-12-31.txt:194.10.97.226 - - [31/12/2019:21:37:31 +0000] "DELETE /lists HTTP/1.1" 400 2447

/home/morty/logs/2019/12/apache\_2019-12-31.txt:180.99.214.40 - - [31/12/2019:21:37:44 +0000] "DELETE /alerts HTTP/1.1" 400 2077

/home/morty/logs/2019/12/apache\_2019-12-31.txt:154.152.205.4 - - [31/12/2019:21:37:50 +0000] "GET /playbooks HTTP/1.1" 400 3324

/home/morty/logs/2019/12/apache\_2019-12-31.txt:197.82.125.54 - - [31/12/2019:21:37:52 +0000] "PUT /fieldsets HTTP/1.1" 400 4365

/home/morty/logs/2019/12/apache\_2019-12-31.txt:115.89.87.219 - - [31/12/2019:21:38:06 +0000] "PUT /playbooks HTTP/1.1" 400 2589

/home/morty/logs/2019/12/apache\_2019-12-31.txt:100.77.15.14 - - [31/12/2019:21:38:07 +0000] "GET /fieldsets HTTP/1.1" 400 4911

/home/morty/logs/2019/12/apache\_2019-12-31.txt:22.33.159.242 - - [31/12/2019:21:38:07 +0000] "GET /playbooks HTTP/1.1" 400 3955

/home/morty/logs/2019/12/apache\_2019-12-31.txt:149.148.229.11 - - [31/12/2019:21:39:16 +0000] "GET /users HTTP/1.1" 400 2071

/home/morty/logs/2019/12/apache\_2019-12-31.txt:236.107.64.192 - - [31/12/2019:21:39:17 +0000] "PATCH /users HTTP/1.1" 400 2791

/home/morty/logs/2019/12/apache\_2019-12-31.txt:24.156.105.39 - - [31/12/2019:21:39:23 +0000] "GET /lists HTTP/1.1" 400 2902

/home/morty/logs/2019/12/apache\_2019-12-31.txt:193.50.164.254 - - [31/12/2019:21:39:23 +0000] "PUT /playbooks HTTP/1.1" 400 3296

/home/morty/logs/2019/12/apache\_2019-12-31.txt:18.123.104.91 - - [31/12/2019:21:39:52 +0000] "GET /collectors HTTP/1.1" 400 4372

/home/morty/logs/2019/12/apache\_2019-12-31.txt:234.218.148.4 - - [31/12/2019:21:39:54 +0000] "PUT /users HTTP/1.1" 400 2509

500.txt

GNU nano 3.2 500.txt

/home/morty/logs/2019/12/apache\_2019-12-30.txt:64.250.112.189 - - [30/12/2019:21:35:13 +0000] "PUT /parsers HTTP/1.1" 500 4639

/home/morty/logs/2019/12/apache\_2019-12-30.txt:193.253.101.180 - - [30/12/2019:21:35:31 +0000] "PATCH /alerts HTTP/1.1" 500 2944

/home/morty/logs/2019/12/apache\_2019-12-30.txt:197.106.117.194 - - [30/12/2019:21:35:31 +0000] "PATCH /parsers HTTP/1.1" 500 3519

/home/morty/logs/2019/12/apache\_2019-12-30.txt:247.124.71.67 - - [30/12/2019:21:35:45 +0000] "PUT /alerts HTTP/1.1" 500 2746

/home/morty/logs/2019/12/apache\_2019-12-30.txt:62.88.204.119 - - [30/12/2019:21:35:51 +0000] "PUT /auth HTTP/1.1" 500 2666

/home/morty/logs/2019/12/apache\_2019-12-30.txt:125.156.142.26 - - [30/12/2019:21:36:01 +0000] "PATCH /events HTTP/1.1" 500 3460

/home/morty/logs/2019/12/apache\_2019-12-30.txt:144.170.212.70 - - [30/12/2019:21:36:04 +0000] "DELETE /parsers HTTP/1.1" 500 2599

/home/morty/logs/2019/12/apache\_2019-12-30.txt:59.39.200.252 - - [30/12/2019:21:36:05 +0000] "GET /alerts HTTP/1.1" 500 2650

/home/morty/logs/2019/12/apache\_2019-12-30.txt:150.136.200.100 - - [30/12/2019:21:37:24 +0000] "POST /lists HTTP/1.1" 500 2684

/home/morty/logs/2019/12/apache\_2019-12-30.txt:84.81.25.45 - - [30/12/2019:21:37:25 +0000] "POST /auth HTTP/1.1" 500 2052

/home/morty/logs/2019/12/apache\_2019-12-30.txt:30.222.160.141 - - [30/12/2019:21:37:30 +0000] "PATCH /parsers HTTP/1.1" 500 2017

/home/morty/logs/2019/12/apache\_2019-12-30.txt:117.87.158.36 - - [30/12/2019:21:37:34 +0000] "POST /fieldsets HTTP/1.1" 500 4056

/home/morty/logs/2019/12/apache\_2019-12-30.txt:212.153.128.212 - - [30/12/2019:21:37:42 +0000] "PUT /fieldsets HTTP/1.1" 500 3259

/home/morty/logs/2019/12/apache\_2019-12-30.txt:58.188.83.217 - - [30/12/2019:21:37:46 +0000] "POST /playbooks HTTP/1.1" 500 3947

/home/morty/logs/2019/12/apache\_2019-12-30.txt:193.123.131.146 - - [30/12/2019:21:37:47 +0000] "PUT /lists HTTP/1.1" 500 3902

/home/morty/logs/2019/12/apache\_2019-12-30.txt:182.7.179.91 - - [30/12/2019:21:37:48 +0000] "GET /users HTTP/1.1" 500 2950

/home/morty/logs/2019/12/apache\_2019-12-30.txt:10.25.168.164 - - [30/12/2019:21:38:05 +0000] "PATCH /playbooks HTTP/1.1" 500 3858

/home/morty/logs/2019/12/apache\_2019-12-30.txt:215.201.210.173 - - [30/12/2019:21:38:11 +0000] "PATCH /customers HTTP/1.1" 500 3277

/home/morty/logs/2019/12/apache\_2019-12-30.txt:179.241.103.167 - - [30/12/2019:21:39:23 +0000] "POST /lists HTTP/1.1" 500 3669

/home/morty/logs/2019/12/apache\_2019-12-30.txt:147.188.170.252 - - [30/12/2019:21:39:33 +0000] "POST /fieldsets HTTP/1.1" 500 3313

/home/morty/logs/2019/12/apache\_2019-12-30.txt:1.249.123.189 - - [30/12/2019:21:39:36 +0000] "PATCH /alerts HTTP/1.1" 500 4734

/home/morty/logs/2019/12/apache\_2019-12-30.txt:124.114.135.105 - - [30/12/2019:21:39:41 +0000] "PATCH /customers HTTP/1.1" 500 3348

/home/morty/logs/2019/12/apache\_2019-12-30.txt:35.215.100.202 - - [30/12/2019:21:39:43 +0000] "PUT /alerts HTTP/1.1" 500 4345

/home/morty/logs/2019/12/apache\_2019-12-30.txt:86.222.23.128 - - [30/12/2019:21:39:44 +0000] "PATCH /alerts HTTP/1.1" 500 2230

/home/morty/logs/2019/12/apache\_2019-12-30.txt:20.161.75.95 - - [30/12/2019:21:39:48 +0000] "DELETE /users HTTP/1.1" 500 2412

/home/morty/logs/2019/12/apache\_2019-12-30.txt:196.18.151.117 - - [30/12/2019:21:39:55 +0000] "PUT /events HTTP/1.1" 500 4439

/home/morty/logs/2019/12/apache\_2019-12-30.txt:77.101.138.151 - - [30/12/2019:21:39:57 +0000] "PUT /lists HTTP/1.1" 500 2194

/home/morty/logs/2019/12/apache\_2019-12-31.txt:208.205.133.127 - - [31/12/2019:21:35:17 +0000] "DELETE /alerts HTTP/1.1" 500 4561

/home/morty/logs/2019/12/apache\_2019-12-31.txt:20.145.255.91 - - [31/12/2019:21:35:30 +0000] "GET /parsers HTTP/1.1" 500 3051

/home/morty/logs/2019/12/apache\_2019-12-31.txt:91.66.134.13 - - [31/12/2019:21:35:53 +0000] "POST /lists HTTP/1.1" 500 3319

/home/morty/logs/2019/12/apache\_2019-12-31.txt:31.88.211.206 - - [31/12/2019:21:35:57 +0000] "DELETE /events HTTP/1.1" 500 2325

/home/morty/logs/2019/12/apache\_2019-12-31.txt:171.37.114.114 - - [31/12/2019:21:37:39 +0000] "DELETE /fieldsets HTTP/1.1" 500 3253

/home/morty/logs/2019/12/apache\_2019-12-31.txt:223.157.242.167 - - [31/12/2019:21:37:59 +0000] "POST /users HTTP/1.1" 500 2283

/home/morty/logs/2019/12/apache\_2019-12-31.txt:98.181.102.34 - - [31/12/2019:21:38:06 +0000] "PATCH /fieldsets HTTP/1.1" 500 4672

/home/morty/logs/2019/12/apache\_2019-12-31.txt:254.74.22.79 - - [31/12/2019:21:38:06 +0000] "PUT /lists HTTP/1.1" 500 2259

/home/morty/logs/2019/12/apache\_2019-12-31.txt:103.46.238.3 - - [31/12/2019:21:38:09 +0000] "PUT /lists HTTP/1.1" 500 3992

/home/morty/logs/2019/12/apache\_2019-12-31.txt:41.62.205.107 - - [31/12/2019:21:39:20 +0000] "PATCH /alerts HTTP/1.1" 500 3631

/home/morty/logs/2019/12/apache\_2019-12-31.txt:22.53.105.197 - - [31/12/2019:21:39:31 +0000] "DELETE /collectors HTTP/1.1" 500 4202

/home/morty/logs/2019/12/apache\_2019-12-31.txt:178.22.133.42 - - [31/12/2019:21:39:43 +0000] "PUT /alerts HTTP/1.1" 500 4648

/home/morty/logs/2019/12/apache\_2019-12-31.txt: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 (cabs.cab\_id) AS cab\_id

FROM

cabs;

Задание 4

Список компаний с числом автомобилей меньше 100.

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

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. | 1

(51 rows)

(END)

Запрос, которым тебе удалось решить задачу.

SELECT

company\_name,

COUNT(vehicle\_id) AS cnt

FROM cabs

GROUP BY

company\_name

HAVING

COUNT(vehicle\_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

(25 rows)

Запрос, которым удалось решить задачу.

SELECT

ts,

CASE WHEN description LIKE'%storm%' OR description LIKE'%rain%' THEN 'Bad'

ELSE 'Good' END AS weather\_conditions

FROM

weather\_records

WHERE

ts >='2017-11-05 00:00:00' AND ts <='2017-11-06 00:00:00';

Задание 6

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

(64 rows)

Запрос, которым удалось решить задачу.

SELECT

cabs.company\_name AS company\_name,

COUNT(trip\_id) AS trips\_amount

FROM

cabs

LEFT JOIN trips ON cabs.cab\_id = trips.cab\_id

WHERE

trips.start\_ts::date = '2017-11-15' OR trips.start\_ts::date = '2017-11-16'

GROUP BY

company\_name

ORDER BY

trips\_amount DESC;