Николай Старостин 38 4 спринт

Консоль

У команды есть подозрение, что система мониторинга неверно учитывает 500-е ошибки. Найди все логи за февраль 2020 года, которые содержат 500 в массе запроса (последние 4 цифры в строке лога)

Задание 1

Команда или последовательность команд, которой удалось получить нужные логи:
  grep -R -E "500.?$" ~/logs/2020/2
Логи:

/home/morty/logs/2020/2/apache_2020-02-07.txt:115.219.109.40 - - [7/2/2020:21:36:04 +0000] "PUT /users HTTP/1.1" 401 4500
/home/morty/logs/2020/2/apache_2020-02-07.txt:123.88.234.133 - - [7/2/2020:21:47:36 +0000] "POST /fieldsets HTTP/1.1" 200 5000
/home/morty/logs/2020/2/apache_2020-02-07.txt:93.241.210.116 - - [7/2/2020:21:58:22 +0000] "GET /auth HTTP/1.1" 201 2500
/home/morty/logs/2020/2/apache_2020-02-07.txt:238.181.47.48 - - [7/2/2020:22:05:59 +0000] "PUT /customers HTTP/1.1" 403 4500
/home/morty/logs/2020/2/apache_2020-02-07.txt:206.211.17.4 - - [7/2/2020:22:12:27 +0000] "PUT /playbooks HTTP/1.1" 403 4500
/home/morty/logs/2020/2/apache_2020-02-12.txt:135.167.192.159 - - [12/2/2020:21:35:55 +0000] "PUT /events HTTP/1.1" 204 3500
/home/morty/logs/2020/2/apache_2020-02-12.txt:24.148.223.215 - - [12/2/2020:21:39:37 +0000] "DELETE /auth HTTP/1.1" 301 5000
/home/morty/logs/2020/2/apache_2020-02-11.txt:159.45.86.118 - - [11/2/2020:21:47:57 +0000] "POST /alerts HTTP/1.1" 403 2500
/home/morty/logs/2020/2/apache_2020-02-11.txt:228.38.237.126 - - [11/2/2020:22:06:14 +0000] "PUT /parsers HTTP/1.1" 204 2500
/home/morty/logs/2020/2/apache_2020-02-01.txt:72.117.196.205 - - [1/2/2020:21:51:37 +0000] "PUT /users HTTP/1.1" 400 4500
/home/morty/logs/2020/2/apache_2020-02-03.txt:113.206.161.63 - - [3/2/2020:21:54:25 +0000] "PUT /alerts HTTP/1.1" 401 2500
/home/morty/logs/2020/2/apache_2020-02-03.txt:204.183.88.223 - - [3/2/2020:22:06:26 +0000] "DELETE /customers HTTP/1.1" 403 4500
/home/morty/logs/2020/2/apache_2020-02-03.txt:36.28.7.18 - - [3/2/2020:22:08:17 +0000] "POST /users HTTP/1.1" 503 3500
/home/morty/logs/2020/2/apache_2020-02-02.txt:219.236.254.192 - - [2/2/2020:21:58:20 +0000] "PATCH /parsers HTTP/1.1" 200 5000
/home/morty/logs/2020/2/apache_2020-02-02.txt:194.48.251.24 - - [2/2/2020:22:04:44 +0000] "GET /auth HTTP/1.1" 400 2500
/home/morty/logs/2020/2/apache_2020-02-14.txt:151.192.138.203 - - [14/2/2020:21:45:38 +0000] "PATCH /auth HTTP/1.1" 300 4500
/home/morty/logs/2020/2/apache_2020-02-14.txt:128.20.205.110 - - [14/2/2020:22:12:15 +0000] "PATCH /lists HTTP/1.1" 204 4500

/home/morty/logs/2020/2/apache_2020-02-08.txt:46.20.41.236 - - [8/2/2020:21:43:57 +0000] "POST /events HTTP/1.1" 300 3500
/home/morty/logs/2020/2/apache_2020-02-08.txt:223.24.178.30 - - [8/2/2020:21:55:52 +0000] "GET /alerts HTTP/1.1" 404 5000
/home/morty/logs/2020/2/apache_2020-02-08.txt:228.96.134.28 - - [8/2/2020:21:58:05 +0000] "PATCH /parsers HTTP/1.1" 204 3500
/home/morty/logs/2020/2/apache_2020-02-08.txt:69.183.68.32 - - [8/2/2020:22:02:51 +0000] "PUT /customers HTTP/1.1" 301 4500
/home/morty/logs/2020/2/apache_2020-02-08.txt:87.28.205.10 - - [8/2/2020:22:08:52 +0000] "PATCH /auth HTTP/1.1" 401 3500
/home/morty/logs/2020/2/apache_2020-02-08.txt:156.20.56.221 - - [8/2/2020:22:12:11 +0000] "POST /events HTTP/1.1" 400 3500
/home/morty/logs/2020/2/apache_2020-02-10.txt:73.222.172.54 - - [10/2/2020:21:43:56 +0000] "POST /customers HTTP/1.1" 503 3500
/home/morty/logs/2020/2/apache_2020-02-10.txt:229.212.154.136 - - [10/2/2020:21:44:13 +0000] "POST /alerts HTTP/1.1" 300 2500
/home/morty/logs/2020/2/apache_2020-02-10.txt:70.47.68.226 - - [10/2/2020:22:12:22 +0000] "POST /customers HTTP/1.1" 301 4500
/home/morty/logs/2020/2/apache_2020-02-19.txt:116.47.146.170 - - [19/2/2020:21:45:56 +0000] "PUT /alerts HTTP/1.1" 500 5000
/home/morty/logs/2020/2/apache_2020-02-18.txt:26.210.114.177 - - [18/2/2020:21:35:30 +0000] "GET /events HTTP/1.1" 503 2500
/home/morty/logs/2020/2/apache_2020-02-18.txt:200.121.117.94 - - [18/2/2020:21:58:25 +0000] "POST /collectors HTTP/1.1" 401 2500
/home/morty/logs/2020/2/apache_2020-02-18.txt:203.225.189.203 - - [18/2/2020:22:12:22 +0000] "PUT /lists HTTP/1.1" 400 5000
/home/morty/logs/2020/2/apache_2020-02-15.txt:109.63.48.99 - - [15/2/2020:22:02:30 +0000] "PATCH /collectors HTTP/1.1" 200 2500
/home/morty/logs/2020/2/apache_2020-02-06.txt:117.207.164.42 - - [6/2/2020:22:08:07 +0000] "GET /auth HTTP/1.1" 403 5000
/home/morty/logs/2020/2/apache_2020-02-06.txt:190.90.158.108 - - [6/2/2020:22:14:11 +0000] "DELETE /alerts HTTP/1.1" 400 3500
/home/morty/logs/2020/2/apache_2020-02-09.txt:102.183.209.214 - - [9/2/2020:21:53:30 +0000] "GET /customers HTTP/1.1" 300 3500
/home/morty/logs/2020/2/apache_2020-02-09.txt:109.183.23.57 - - [9/2/2020:22:06:16 +0000] "PATCH /parsers HTTP/1.1" 503 3500
/home/morty/logs/2020/2/apache_2020-02-09.txt:82.106.89.96 - - [9/2/2020:22:13:51 +0000] "PUT /parsers HTTP/1.1" 400 4500
/home/morty/logs/2020/2/apache_2020-02-09.txt:192.230.9.247 - - [9/2/2020:22:14:15 +0000] "PUT /events HTTP/1.1" 301 3500

Задани 2
В системе есть баг. Он проявлялся с первого по девятое января 2020 года. Запросы на удаление /lists давали ошибки 500 и 503. Твоя задача — сохранить в отдельный файл логи, которые были записаны в этот период. Затем эти логи надо разложить по отдельным файлам: логи с одинаковой ошибкой положи в один файл Как это сделать: В домашней директории на удалённом сервере создай директорию bug2. Все запросы на удаление ресурса /lists, которые произошли в указанный период, положи в файл main.txt в директорию bug2. Внутри директории bug2 создай директорию testlogs. Внутри директории testlogs создай файлы для ошибок с номерами 500 и 503. Назови эти файлы 500.txt и 503.txt соответственно. В них собери логи с соответствующей ошибкой из файла main.txt.
 В ответе приложи: 1. команды, которые создают директории bug2 и testlogs; 2. команду, которой ты выбираешь запросы за указанный период. Это те запросы, которыми ты отбираешь логи в файл main.txt; 3. команды, которыми ты кладёшь логи в файлы 500.txt и 503.txt из main.txt; 4. тексты файлов 500.txt и 503.txtе 2

Команды, которые создают директории bug2 и testlog:
mkdir bug2
mkdir -p bug2/testlog

Команда, которой выбираешь запросы за указанный период. Это те запросы, которыми ты отбираешь логи в файл main.txt:
grep -r '\[[1-9]/1/2020.*DELETE /lists' ~/logs/2020/1 > ~/bug2/main.txt

Команды, которыми ты кладешь логи в файлы 500.txt и 503.txt из main.txt:
grep ".500" bug2/main.txt > bug2/testlog/500.txt

grep ".503" bug2/main.txt > bug2/testlog/503.txt

500.txt
/home/morty/logs/2020/1/apache_2020-01-01.txt:147.185.102.245 - - [1/1/2020:21:56:16 +0000] "DELETE /lists HTTP/1.1" 500 3446

/home/morty/logs/2020/1/apache_2020-01-01.txt:213.18.145.29 - - [1/1/2020:22:03:58 +0000] "DELETE /lists HTTP/1.1" 500 3401

/home/morty/logs/2020/1/apache_2020-01-06.txt:110.226.87.25 - - [6/1/2020:21:41:28 +0000] "DELETE /lists HTTP/1.1" 500 2678

/home/morty/logs/2020/1/apache_2020-01-06.txt:152.179.35.38 - - [6/1/2020:21:49:20 +0000] "DELETE /lists HTTP/1.1" 500 4038

/home/morty/logs/2020/1/apache_2020-01-06.txt:183.55.199.161 - - [6/1/2020:21:57:27 +0000] "DELETE /lists HTTP/1.1" 500 2983

/home/morty/logs/2020/1/apache_2020-01-06.txt:193.20.89.213 - - [6/1/2020:22:00:04 +0000] "DELETE /lists HTTP/1.1" 500 2337

/home/morty/logs/2020/1/apache_2020-01-09.txt:198.181.19.16 - - [9/1/2020:22:08:41 +0000] "DELETE /lists HTTP/1.1" 500 4498

/home/morty/logs/2020/1/apache_2020-01-05.txt:83.123.65.88 - - [5/1/2020:21:45:47 +0000] "DELETE /lists HTTP/1.1" 500 4538

/home/morty/logs/2020/1/apache_2020-01-05.txt:27.238.157.134 - - [5/1/2020:21:48:24 +0000] "DELETE /lists HTTP/1.1" 500 2264

/home/morty/logs/2020/1/apache_2020-01-05.txt:128.42.75.55 - - [5/1/2020:21:54:05 +0000] "DELETE /lists HTTP/1.1" 500 3639

/home/morty/logs/2020/1/apache_2020-01-07.txt:209.161.43.167 - - [7/1/2020:21:41:54 +0000] "DELETE /lists HTTP/1.1" 500 4546

/home/morty/logs/2020/1/apache_2020-01-07.txt:37.51.204.79 - - [7/1/2020:22:04:43 +0000] "DELETE /lists HTTP/1.1" 500 4196

/home/morty/logs/2020/1/apache_2020-01-02.txt:194.245.91.116 - - [2/1/2020:21:58:20 +0000] "DELETE /lists HTTP/1.1" 500 3346

/home/morty/logs/2020/1/apache_2020-01-02.txt:83.46.27.91 - - [2/1/2020:22:00:33 +0000] "DELETE /lists HTTP/1.1" 500 4635

/home/morty/logs/2020/1/apache_2020-01-02.txt:231.148.197.229 - - [2/1/2020:22:06:24 +0000] "DELETE /lists HTTP/1.1" 500 3156

/home/morty/logs/2020/1/apache_2020-01-04.txt:12.136.227.159 - - [4/1/2020:21:35:22 +0000] "DELETE /lists HTTP/1.1" 500 3368

/home/morty/logs/2020/1/apache_2020-01-04.txt:129.56.252.93 - - [4/1/2020:21:39:24 +0000] "DELETE /lists HTTP/1.1" 500 4128

/home/morty/logs/2020/1/apache_2020-01-04.txt:132.215.126.118 - - [4/1/2020:21:40:19 +0000] "DELETE /lists HTTP/1.1" 500 3366

/home/morty/logs/2020/1/apache_2020-01-04.txt:67.178.31.1 - - [4/1/2020:21:43:52 +0000] "DELETE /lists HTTP/1.1" 500 2366

/home/morty/logs/2020/1/apache_2020-01-04.txt:146.29.129.61 - - [4/1/2020:21:45:39 +0000] "DELETE /lists HTTP/1.1" 500 2447

/home/morty/logs/2020/1/apache_2020-01-04.txt:223.92.38.69 - - [4/1/2020:22:08:22 +0000] "DELETE /lists HTTP/1.1" 500 4386

/home/morty/logs/2020/1/apache_2020-01-03.txt:96.78.191.98 - - [3/1/2020:21:50:23 +0000] "DELETE /lists HTTP/1.1" 500 4530

/home/morty/logs/2020/1/apache_2020-01-08.txt:137.16.176.177 - - [8/1/2020:22:06:10 +0000] "DELETE /lists HTTP/1.1" 500 4818

/home/morty/logs/2020/1/apache_2020-01-08.txt:9.208.230.202 - - [8/1/2020:22:11:48 +0000] "DELETE /lists HTTP/1.1" 500 3100

503.txt.

/home/morty/logs/2020/1/apache_2020-01-01.txt:19.160.250.159 - - [1/1/2020:21:41:44 +0000] "DELETE /lists HTTP/1.1" 503 4750

/home/morty/logs/2020/1/apache_2020-01-01.txt:144.27.121.7 - - [1/1/2020:21:49:31 +0000] "DELETE /lists HTTP/1.1" 503 4277

/home/morty/logs/2020/1/apache_2020-01-01.txt:3.206.159.146 - - [1/1/2020:21:51:54 +0000] "DELETE /lists HTTP/1.1" 503 4915

/home/morty/logs/2020/1/apache_2020-01-01.txt:194.84.118.234 - - [1/1/2020:22:08:37 +0000] "DELETE /lists HTTP/1.1" 503 3791

/home/morty/logs/2020/1/apache_2020-01-09.txt:120.245.57.164 - - [9/1/2020:21:51:54 +0000] "DELETE /lists HTTP/1.1" 503 2794

/home/morty/logs/2020/1/apache_2020-01-09.txt:234.142.98.227 - - [9/1/2020:22:04:39 +0000] "DELETE /lists HTTP/1.1" 503 3735

/home/morty/logs/2020/1/apache_2020-01-05.txt:237.5.185.3 - - [5/1/2020:21:40:13 +0000] "DELETE /lists HTTP/1.1" 503 4136

/home/morty/logs/2020/1/apache_2020-01-05.txt:200.199.223.244 - - [5/1/2020:21:50:19 +0000] "DELETE /lists HTTP/1.1" 503 3720

/home/morty/logs/2020/1/apache_2020-01-07.txt:88.89.12.250 - - [7/1/2020:21:37:52 +0000] "DELETE /lists HTTP/1.1" 503 4832

/home/morty/logs/2020/1/apache_2020-01-07.txt:156.143.245.173 - - [7/1/2020:21:48:03 +0000] "DELETE /lists HTTP/1.1" 503 2520

/home/morty/logs/2020/1/apache_2020-01-07.txt:4.98.74.61 - - [7/1/2020:21:48:12 +0000] "DELETE /lists HTTP/1.1" 503 2291

/home/morty/logs/2020/1/apache_2020-01-02.txt:196.214.162.172 - - [2/1/2020:21:57:38 +0000] "DELETE /lists HTTP/1.1" 503 3741

/home/morty/logs/2020/1/apache_2020-01-02.txt:109.34.83.0 - - [2/1/2020:22:08:33 +0000] "DELETE /lists HTTP/1.1" 503 2354

/home/morty/logs/2020/1/apache_2020-01-02.txt:144.210.73.130 - - [2/1/2020:22:12:40 +0000] "DELETE /lists HTTP/1.1" 503 4554

/home/morty/logs/2020/1/apache_2020-01-04.txt:110.123.248.237 - - [4/1/2020:21:46:28 +0000] "DELETE /lists HTTP/1.1" 503 3666

/home/morty/logs/2020/1/apache_2020-01-04.txt:142.26.155.9 - - [4/1/2020:21:54:30 +0000] "DELETE /lists HTTP/1.1" 503 4927

/home/morty/logs/2020/1/apache_2020-01-04.txt:242.124.191.149 - - [4/1/2020:21:58:46 +0000] "DELETE /lists HTTP/1.1" 503 3681

/home/morty/logs/2020/1/apache_2020-01-04.txt:110.97.214.228 - - [4/1/2020:21:58:52 +0000] "DELETE /lists HTTP/1.1" 503 3557

/home/morty/logs/2020/1/apache_2020-01-03.txt:21.137.106.32 - - [3/1/2020:21:48:20 +0000] "DELETE /lists HTTP/1.1" 503 4335

/home/morty/logs/2020/1/apache_2020-01-03.txt:199.241.232.242 - - [3/1/2020:21:58:01 +0000] "DELETE /lists HTTP/1.1" 503 3502

/home/morty/logs/2020/1/apache_2020-01-03.txt:52.77.221.51 - - [3/1/2020:22:06:15 +0000] "DELETE /lists HTTP/1.1" 503 4392

/home/morty/logs/2020/1/apache_2020-01-03.txt:73.51.7.29 - - [3/1/2020:22:09:01 +0000] "DELETE /lists HTTP/1.1" 503 3872

/home/morty/logs/2020/1/apache_2020-01-03.txt:81.20.165.70 - - [3/1/2020:22:11:01 +0000] "DELETE /lists HTTP/1.1" 503 3325

/home/morty/logs/2020/1/apache_2020-01-08.txt:180.150.222.142 - - [8/1/2020:21:41:43 +0000] "DELETE /lists HTTP/1.1" 503 4975

/home/morty/logs/2020/1/apache_2020-01-08.txt:244.190.76.89 - - [8/1/2020:21:46:13 +0000] "DELETE /lists HTTP/1.1" 503 2015

/home/morty/logs/2020/1/apache_2020-01-08.txt:133.169.105.213 - - [8/1/2020:21:47:38 +0000] "DELETE /lists HTTP/1.1" 503 3369

/home/morty/logs/2020/1/apache_2020-01-08.txt:247.226.78.194 - - [8/1/2020:21:50:04 +0000] "DELETE /lists HTTP/1.1" 503 2968

/home/morty/logs/2020/1/apache_2020-01-08.txt:192.148.191.93 - - [8/1/2020:22:07:39 +0000] "DELETE /lists HTTP/1.1" 503 3090

SQL

Описание В заданиях используется база данных chicago_taxi (описание таблиц, схемы можно посмотреть в задании четвертого спринта)

База данных

Задание 1

Посчитай, сколько всего уникальных погодных явлений в таблице weather_records

```
 description_uniq_cnt
----------------------
                   19
(1 row)
```

Запрос, которым тебе удалось решить задачу.
SELECT COUNT(DISTINCT description) AS description_uniq_cnt FROM weather_records;

Задание 2

Вывести первые 10 компаний без повторений, которые не содержат в названии "Taxi" и "Chicago"

```
            company_name
---------------------------------------------
 Metro Group

 Blue Diamond

 3556 - 36214 RC Andrews Cab

 Norshore Cab

 3721 - Santamaria Express, Alvaro Santamaria

 2809 - 95474 C & D Cab Co Inc.

 2241 - 44667 - Felman Corp, Manuel Alonso

 3620 - 52292 David K. Cab Corp.

 2823 - 73307 Lee Express Inc

 6057 - 24657 Richard Addo
```

(10 rows)

Запрос, которым тебе удалось решить задачу.

SELECT DISTINCT company_name AS company_name FROM cabs WHERE NOT (company_name LIKE '%Chicago%' OR company_name LIKE '%Taxi%') LIMIT 10;

Задание 3

Посчитать количество поездок для каждого такси за 5 ноября 2017 года. Отсортировать значения по возрастанию. Вывести список такси, которые совершили не менее 40 поездок

```
 cab_id | cnt
--------+-----
   4695 |  40
   3124 |  40
   1780 |  40
    719 |  40
   4137 |  41
   4189 |  41
   4100 |  42
   1945 |  43
   1503 |  43
   4039 |  43
   4806 |  44
   1981 |  44
    803 |  45
   4281 |  46
   2451 |  47
   1599 |  47
   2384 |  48
(17 rows)
```

Запрос, которым удалось решить задачу.

```
SELECT cab_id, COUNT(trip_id) AS cnt

FROM trips

WHERE DATE(start_ts) = '2017-11-05'

GROUP BY cab_id

HAVING COUNT(trip_id) >= 40

ORDER BY cnt ASC;
```

Задание 4

Узнать районы города, где завершались поездки 16 и 17 ноября 2017 года. Получить выборку с количеством поездок в эти районы

```
      name        |  cnt
------------------+-------
 Loop             | 29559
 River North      | 23279
 Streeterville    | 15811
 West Loop        | 14809
 O'Hare           |  6804
 Lake View        |  5757
 Grant Park       |  4962
 Gold Coast       |  3682
 Lincoln Park     |  3153
 East Village     |  2762
 Sheffield & DePaul   |  2749
 Museum Campus    |  2147
 Garfield Ridge   |  2139
 Little Italy, UIC   |  2074
 Uptown           |  1962
 West Town        |  1543
 Near South Side  |  1491
 Logan Square     |  1457
 Old Town         |  1389
```

```
Edgewater            | 1342
Rush & Division      | 1060
North Center         | 1019
Lincoln Square       |  887
West Ridge           |  703
Rogers Park          |  681
Irving Park          |  680
Hyde Park            |  646
Avondale             |  502
Wicker Park          |  467
United Center        |  408
Lower West Side      |  375
Douglas              |  366
Albany Park          |  365
Portage Park         |  266
Bucktown             |  261
Norwood Park         |  233
Mckinley Park        |  230
Bridgeport           |  195
Humboldt Park        |  193
Kenwood              |  190
North Park           |  168
Jefferson Park       |  167
Armour Square        |  146
Garfield Park        |  134
Boystown             |  129
Grand Boulevard      |  117
Belmont Cragin       |  116
Sauganash,Forest Glen |  104
Austin               |  96
South Shore          |  93
Ukrainian Village    |  84
Andersonville        |  81
Woodlawn             |  77
North Lawndale       |  73
Chinatown            |  71
Little Village       |  63
Chatham              |  60
Dunning              |  59
Englewood            |  58
Hermosa              |  57
Brighton Park        |  51
New City             |  46
Oakland              |  45
Washington Park      |  45
Grand Crossing       |  43
Jackson Park         |  43
Auburn Gresham       |  41
```

```
Edison Park          |    36
Wrigleyville         |    35
Ashburn              |    32
Clearing             |    31
Roseland             |    31
South Chicago        |    31
Washington Heights   |    28
Chicago Lawn         |    24
Beverly              |    24
West Lawn            |    19
Morgan Park          |    18
Archer Heights       |    18
Calumet Heights      |    17
South Deering        |    15
West Pullman         |    15
Montclare            |    13
Avalon Park          |    12
West Elsdon          |    12
Fuller Park          |    11
Pullman              |    11
Gage Park            |    10
Undef                |    6
Mount Greenwood      |    5
Burnside             |    5
Riverdale            |    5
East Side            |    4
Hegewisch            |    4
(94 rows)
```

Запрос, которым удалось решить задачу.

SELECT neighborhoods.name AS name, COUNT(*) AS cnt

FROM trips INNER JOIN neighborhoods ON neighborhoods.neighborhood_id = trips.dropoff_location_id

WHERE trips.end_ts BETWEEN '2017-11-16 00:00:00' AND '2017-11-17 23:59:59'

GROUP BY name

ORDER BY cnt DESC;