The Console

Task 1

1: Enter the command or sequence of commands that returned the required logs:

```
Unset
grep ^233.201. ~/logs/2019/12/*.txt
```

2: Show the results of your search:

```
Unset
/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
```

Task 2

1: Enter the commands you used to create the /bug1 and /events directories:

```
Unset
mkdir bug1

cd bug1

mkdir events
```

2: Enter the commands you used to select logs for the specified periods. These are the requests that you use to select logs for the `main.txt` file:

```
Unset
 grep ' [45]00 ' ~/logs/2019/12/apache_2019-12-30.txt >
bug1/main.txt
```

3: Enter the commands that you used to put logs from the `main.txt` file into the `400.txt` and `500.txt` files:

```
Unset
grep ' 400 ' ~/logs/bug1/main.txt > ~/logs/bug1/events/400.txt

grep ' 500 ' ~/logs/bug1/main.txt > ~/logs/bug1/events/500.txt
```

4: Show the results of your work, i.e. the contents of `400.txt` and `500.txt`. Since there will be many lines of text, provide a selection of the output, as below:

A: The line count of `400.txt`. Use `wc ~/bug1/events/400.txt` to get the answer.

```
Unset
 172  1720 13860 /home/morty/logs/bug1/events/400.txt
```

B: The first 3 lines from `400.txt`. Use `head -3 ~/bug1/events/400.txt` to get the answer.

```
Unset
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
```

C: The last 3 lines from 400.txt. Use `tail -3 ~/bug1/events/400.txt` to get the answer.

```
Unset
203.106.235.105 - - [30/12/2019:22:12:38 +0000] "DELETE /events
HTTP/1.1" 400 4158

18.211.28.150 - - [30/12/2019:22:12:40 +0000] "DELETE /collectors
HTTP/1.1" 400 2212

229.16.123.45 - - [30/12/2019:22:12:54 +0000] "GET /auth
HTTP/1.1" 400 2397
```

D: The line count of `500.txt`. Use `wc ~/bug1/events/500.txt` to get the answer.

```
Unset
156  1560 12554 /home/morty/logs/bug1/events/500.txt
```

E: The first 3 lines from `500.txt`. Use `head -3 ~/bug1/events/500.txt` to get the answer.

```
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
```

F: The last 3 lines from `500.txt`. Use `tail -3 ~/bug1/events/500.txt` to get the answer.

```
207.6.210.203 - - [30/12/2019:22:12:37 +0000] "PATCH /events
HTTP/1.1" 500 4298

33.13.118.148 - - [30/12/2019:22:12:38 +0000] "PUT /alerts
HTTP/1.1" 500 4711

107.188.33.199 - - [30/12/2019:22:12:59 +0000] "POST /parsers
HTTP/1.1" 500 2833
```

Databases

Task 3

Please specify the number of cars: 5500

The query that you used to find the number of cars:

```
Unset
SELECT COUNT(DISTINCT vehicle_id) FROM cabs;
```

Task 4

List of companies with fewer than 100 cars:

```
Unset
 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
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
```

The query that you used to generate the list of companies above:

```
Unset
SELECT

    COUNT(vehicle_id) AS cnt,

    company_name

FROM

    cabs

GROUP BY

    company_name

HAVING COUNT(vehicle_id) < 100

ORDER BY

    cnt DESC;
```