Apply filters to SQL queries

Project description

This project demonstrates my ability to write SQL queries but also to apply filters for certain search criteria.

Retrieve after hours failed login attempts

```
MariaDB [organization]> SELECT *
   -> FROM log_in_attempts
   -> WHERE login_time > '18:00:00' AND success=0;
 event id | username | login date | login time | country | ip address
                                                                         success
                                                        | 192.168.205.12
        2 | apatel | 2022-05-10 | 20:27:27 | CAN
                                                                                 0 |
       18 | pwashing | 2022-05-11 | 19:28:50 | US
                                                        | 192.168.66.142
                                                                                 0 |
                     | 2022-05-12 | 18:56:36 | MEXICO | 192.168.109.50
       20 | tshah
                                                                                 0
       28 | aestrada | 2022-05-09 | 19:28:12
                                              | MEXICO | 192.168.27.57
                                                                                 0
       34
          drosas
                    | 2022-05-11 |
                                                          192.168.45.93
                                   21:02:04
          | cgriffin | 2022-05-09 |
                                                         192.168.4.157
       42
                                   23:04:05
                                              US
       52
          | cjackson | 2022-05-10 | 22:07:07
                                              CAN
                                                        | 192.168.58.57
                                                                                 0
       69 | wjaffrey | 2022-05-11 | 19:55:15
                                              USA
                                                        | 192.168.100.17
       82 | abernard | 2022-05-12 | 23:38:46
                                              MEX
                                                        | 192.168.234.49
                                                                                 0
       87
          | apatel | 2022-05-08 | 22:38:31
                                              | CANADA | 192.168.132.153
                                                                                 0
       96
          | ivelasco | 2022-05-09 | 22:36:36
                                              CAN
                                                         192.168.84.194
      104
          | asundara | 2022-05-11 | 18:38:07
                                                         192.168.96.200
          | bisles | 2022-05-12 | 20:25:57
      107
                                                        | 192.168.116.187
                                              USA
      111 | aestrada | 2022-05-10 | 22:00:26
                                              | MEXICO | 192.168.76.27
      127 | abellmas | 2022-05-09 | 21:20:51
                                              | CANADA | 192.168.70.122
                                                                                 0
      131 | bisles
                                             US
                     | 2022-05-09 | 20:03:55
                                                        | 192.168.113.171
                                                                                 0
                                              USA
      155 | cgriffin | 2022-05-12 | 22:18:42
                                                        | 192.168.236.176
                                                                                 0 1
      160
            jclark
                       2022-05-10 |
                                   20:49:00
                                              CANADA
                                                          192.168.214.49
                                                                                 0
      199
            yappiah
                    | 2022-05-11 | 19:34:48
                                                        | 192.168.44.232
                                              MEXICO
                                                                                 0 1
19 rows in set (0.002 sec)
MariaDB [organization]> [
```

Retrieve login attempts on specific dates

```
MariaDB [organization] > SELECT *
       FROM log in attempts
       WHERE login_date = '2022-05-09' OR login_date = '2022-05-08';
 event_id | username
                         login_date |
                                      login time
                                                               ip_address
                                                    country
                                                                                  success
             jrafael
                         2022-05-09 |
                                       04:56:27
                                                               192.168.243.140
                                                                                         1
         3
                         2022-05-09
                                                     USA
                                                               192.168.151.162
             dkot
                                       06:47:41
                                                               192.168.178.71
                         2022-05-08
                                       02:00:39
                                                     USA
                                                                                         0
             dkot
                         2022-05-08
                                                               192.168.119.173
             bisles
                                       01:30:17
                                                     US
                                                                                         0
         8
        12
             dkot
                         2022-05-08
                                       09:11:34
                                                     USA
                                                               192.168.100.158
        15
             lyamamot
                         2022-05-09
                                       17:17:26
                                                     USA
                                                               192.168.183.51
                                                                                         0
                         2022-05-09
                                                               192.168.171.192
                                                    MEXICO
        24
             arusso
                                       06:49:39
             sbaelish
                         2022-05-09
                                       07:04:02
                                                               192.168.33.137
        26
             apatel
                         2022-05-08
                                       17:27:00
                                                     CANADA
                                                               192.168.123.105
                                                                                         1
                                                               192.168.27.57
                                                                                         0
        28
             aestrada
                         2022-05-09
                                       19:28:12
                                                     MEXICO
             yappiah
        30
                         2022-05-09
                                       03:22:22
                                                     MEX
                                                               192.168.124.48
                                                                                         1
                                                     CANADA
                                                                                         0
        32
             acook
                         2022-05-09
                                       02:52:02
                                                               192.168.142.239
        36
                         2022-05-08
                                                               192.168.78.151
             asundara
                                       09:00:42
                                                     US
             sbaelish
                         2022-05-09
                                                               192.168.60.42
        38
                                       14:40:01
                                                     USA
             yappiah
        39
                         2022-05-09
                                       07:56:40
                                                     MEXICO
                                                               192.168.57.115
             cgriffin
                                                               192.168.4.157
192.168.16.208
        42
                         2022-05-09
                                       23:04:05
                                                     US
                                                                                         0
        43
                                                    CANADA
             mcouliba
                         2022-05-08
                                       02:35:34
                                                                                         0
                                                     CANADA
                                                               192.168.168.144
        44
             daquino
                         2022-05-08
                                       07:02:35
                                                                                         0
        47
             dkot
                         2022-05-08
                                                               192.168.233.24
                                       05:06:45
                                                    US
                                                                                         1
        49
                         2022-05-08
                                       14:00:01
                                                               192.168.173.213
                                                                                         0
             asundara
                                       11:51:38
        53
                         2022-05-08
                                                     CAN
                                                               192.168.133.188
             1000 (215(0)))
                                                                                         1
        56
             acook
                         2022-05-08
                                       04:56:30
                                                     CAN
                                                               192.168.209.130
        58
             ivelasco
                         2022-05-09
                                       17:20:54
                                                     CAN
                                                               192.168.57.162
                                                                                         0
                                                               192.168.98.221
        61
                         2022-05-09
                                       09:45:18
                                                     USA
             dtanaka
                                                                                         1
                         2022-05-09
                                       23:42:12
                                                     MEX
                                                               192.168.52.37
        65
             aalonso
                                                               192.168.67.223
192.168.118.29
        66
                                       21:58:32
             aestrada
                         2022-05-08
                                                    MEX
                                                                                         1
        67
             abernard
                         2022-05-09
                                       11:53:41
                                                     MEX
        68
             mrah
                         2022-05-08
                                       17:16:13
                                                     US
                                                               192.168.42.248
                                                                                         1
                         2022-05-09
                                                    MEXICO
        70
             tmitchel
                                       10:55:17
                                                               192.168.87.199
                                                                                         1
        71
             mcouliba
                         2022-05-09
                                       06:57:42
                                                     CAN
                                                               192.168.55.169
                                                                                         0
        72
                         2022-05-08
                                                               192.168.139.176
             alevitsk
                                       12:09:10
                                                     CANADA
        79
             abernard
                         2022-05-09
                                       11:41:15
                                                     MEX
                                                               192.168.158.170
                                                                                         0
             cjackson
        80
                         2022-05-08
                                       02:18:10
                                                     CANADA
                                                               192.168.33.140
                                                                                         1
                         2022-05-08
                                                               192.168.67.69
        83
             lrodrigu
                                       08:10:23
                                                     USA
                                                                                         0
        87
             apatel
                         2022-05-08
                                       22:38:31
                                                     CANADA
                                                               192.168.132.153
                         2022-05-09
        90
                                                     CANADA
                                                               192.168.87.201
                                                                                         0
             gesparza
                                       00:49:05
             pwashing
                         2022-05-08
                                       00:36:12
                                                               192.168.247.219
                                                                                         0
        96
             ivelasco
                         2022-05-09
                                       22:36:36
                                                     CAN
                                                               192.168.84.194
                                                                                         0
        97
             jreckley
                         2022-05-09
                                       02:49:23
                                                     MEXICO
                                                               192.168.32.231
                                                                                         1
       101
             sbaelish
                         2022-05-08
                                       12:01:22
                                                               192.168.145.158
                                                                                         0
                                                     US
       102
             jreckley
                         2022-05-09
                                       16:51:44
                                                    MIDIX
                                                               192.168.108.13
       108
             daquino
                                                     CANADA
                                                               192.168.15.110
                         2022-05-09
                                       21:30:48
                                       00:01:54
                                                                                         1
       110
             mabadi
                         2022-05-09
                                                     USA
                                                               192.168.90.124
       112
             rjensen
                         2022-05-09
                                       09:22:05
                                                     MEX
                                                               192.168.69.116
       117
                         2022-05-08
                                       00:19:11
                                                     USA
                                                               192.168.197.187
                                                                                         0
             bsand
       120 I
             tmitchel |
                         2022-05-09 | 02:58:17
                                                   MEXICO
                                                             | 192.168.134.62
```

Retrieve login attempts outside of Mexico

MariaDB [organization]> select * from log_in_attempts where NOT country LIKE 'MEX%';								
event_id	username	login_date	login_time	country	ip_address	success		
1	jrafael	2022-05-09	04:56:27	CAN	192.168.243.140	1 1 i		
2				CAN	192.168.205.12	i 0 i		
3	dkot	2022-05-09		USA	192.168.151.162	1 1		
4		2022-05-08	02:00:39	USA	192.168.178.71	0 1		
5	jrafael	2022-05-11	03:05:59	CANADA	192.168.86.232	0 1		
7	_	2022-05-11	01:45:14	CAN	192.168.170.243	1 1		
8	bisles	2022-05-08	01:30:17	US		i 0 i		
10	jrafael	2022-05-12	09:33:19	CANADA	192.168.228.221	0 1		
11	gilmore	2022-05-11	10:16:29	CANADA	192.168.140.81	0 1		
12	dkot	2022-05-08	09:11:34	USA	192.168.100.158	1 1		
13	mrah	2022-05-11	09:29:34	USA	192.168.246.135	1 1		
14	sbaelish	2022-05-10	10:20:18	US	192.168.16.99	1 1		
15	lyamamot	2022-05-09	17:17:26	USA	192.168.183.51	0 1		
	mcouliba	2022-05-11		CAN		1 1		
17	pwashing	2022-05-11	02:33:02	USA	192.168.81.89	1 1		
18	pwashing	2022-05-11	19:28:50	US	192.168.66.142	0 1		
	jhill		13:09:04	US	192.168.142.245	1 1		
	iuduike	2022-05-11	17:50:00	US	192.168.131.147	1 1		
25	sbaelish	2022-05-09	07:04:02	US	192.168.33.137	1 1		
26	apatel	2022-05-08	17:27:00	CANADA	192.168.123.105	1 1		
	bisles	2022-05-11		US	192.168.85.186	i		
31	acook	2022-05-12		CANADA	192.168.58.232	i 0 i		
32	acook	2022-05-09	02:52:02	CANADA	192.168.142.239	i 0 i		
33	zbernal	2022-05-11	02:52:10	US	192.168.72.59	1 1		
34	drosas	2022-05-11	21:02:04	US	192.168.45.93	0 1		
36	asundara	2022-05-08	09:00:42	US	192.168.78.151	1 1		
37	eraab	2022-05-10	06:03:41	CANADA	192.168.152.148	0 1		
38	sbaelish	2022-05-09	14:40:01	USA	192.168.60.42	1 1		
41	apatel	2022-05-10	17:39:42	CANADA	192.168.46.207	0 1		
42	cgriffin	2022-05-09	23:04:05	US	192.168.4.157	0 1		
43	mcouliba	2022-05-08	02:35:34	CANADA	192.168.16.208	0 1		
44	daquino	2022-05-08	07:02:35	CANADA	192.168.168.144	0 1		
45	dtanaka	2022-05-11	10:28:54	US	192.168.223.157	1 1		
46	eraab	2022-05-11	11:29:27	CAN	192.168.24.12	0 1		
47	dkot	2022-05-08	05:06:45	US	192.168.233.24	1 1 1		
48	asundara	2022-05-11	03:18:45	USA	192.168.72.10	1 1 1		
49	asundara	2022-05-08	14:00:01	US	192.168.173.213	0 1		
50	jclark	2022-05-10	10:48:02	CANADA	192.168.174.117	0 1		
51	jrafael	2022-05-10	22:40:01	CANADA	192.168.148.115	1 1 1		
52		2022-05-10	22:07:07	CAN	192.168.58.57	0 1		
53	nmason	2022-05-08	11:51:38	CAN	192.168.133.188	1 1 1		
55	jlansky	2022-05-11	05:15:34	US	192.168.6.170	0 1		
56	acook	2022-05-08	04:56:30	CAN	192.168.209.130	1 1 1		
57	asundara	2022-05-12	21:13:02	US	192.168.211.201	1 1 1		
58	ivelasco	2022-05-09	17:20:54	CAN	192.168.57.162	0 1		
I 60	acook	2022-05-11	21:46:00	CAN	192.168.54.45	1 1 1		
61	dtanaka	2022-05-09	09:45:18	USA	192.168.98.221	1 1 1		
64	apatel	2022-05-10	22:00:09	CANADA	192.168.172.71	1 1		

Retrieve employees in Marketing

```
MariaDB [orqanization] > select * from employees where department='Marketing'
    -> AND office like 'East%';
 employee id | device id
                             | username | department | office
         1000 | a320b137c219 | elarson | Marketing
                                                      | East-170
         1052 | a192b174c940 | jdarosa | Marketing
                                                      | East-195
         1075 | x573y883z772 | fbautist | Marketing
                                                      | East-267
         1088 | k8651965m233 | rgosh
                                        | Marketing
                                                      | East-157
        1103 | NULL
                             | randerss | Marketing
                                                      | East-460
         1156 | a184b775c707 | dellery | Marketing
                                                      | East-417
         1163 | h679i515j339 | cwilliam | Marketing
                                                      | East-216
 rows in set (0.001 sec)
MariaDB [organization]> 🗌
```

Retrieve employees in Finance or Sales

```
MariaDB [organization]> select * from employees where department='Finance' OR department='Sales';
 employee_id | device_id
                              | username | department | office
                d394e816f943 | sgilmore | Finance
         1003
                                                        South-153
                               wjaffrey
         1007
                h174i497j413 |
                                           Finance
                                                        North-406
         1008
                i858j583k571 | abernard |
                                           Finance
                                                        South-170
                               lrodriqu |
         1009
                NULL
                                           Sales
                                                         South-134
         1010
                k2421212m542
                               jlansky |
                                           Finance
                                                         South-109
                1748m120n401
                                                        South-292
         1011
                               drosas
                                           Sales
         1015
                p611q262r945
                                jsoto
                                           Finance
                                                        North-271
         1017
                r550s824t230
                                jclark
                                           Finance
                                                        North-188
                               abellmas |
         1018
                s310t540u653 |
                                           Finance
                                                        North-403
         1022
                w237x430y567
                                arusso
                                           Finance
                                                         West-465
         1024
                y976z753a267
                                iuduike
                                           Sales
                                                        South-215
         1025
                z381a365b233 |
                               jhill
                                           Sales
                                                        North-115
         1029
                d336e475f676 |
                               ivelasco |
                                           Finance
                                                        East-156
                j236k3031245 | bisles
         1035
                                                        South-171
                                           Sales
                               cjackson
         1039
                n253o917p623 |
                                           Sales
                                                         East-378
                               cgriffin |
                                                        North-208
         1041
                p929q222r778 |
                                           Sales
         1044
                s429t157u159
                               tbarnes
                                           Finance
                                                        West-415
         1045
                t567u844v434 |
                               pwashing
                                           Finance
                                                        East-115
                               daquino
         1046
                u429v921w138 |
                                           Finance
                                                        West-280
         1047
                v109w587x644
                               cward
                                           Finance
                                                        West-373
         1048
                w167x592y375 |
                                                        South-288
                               tmitchel
                                           Finance
         1049
                NULL
                               jreckley
                                           Finance
                                                        Central-295
         1050
                y132z930a114 |
                               csimmons |
                                           Finance
                                                        North-468
                                                        South-270
         1057
                f370g535h632 |
                               mscott
                                           Sales
         1062
                k3671639m697
                               redwards
                                                        North-180
                                           Finance
         1063
                1686m140n569 |
                                           Sales
                                                        East-226
                               lpope
                                ttyrell
         1066
                o678p794q957 |
                                           Sales
                                                        Central-444
                                jpark
         1069
                NULL
                                           Finance
                                                        East-110
         1071
                t244u829v723 |
                                                        West-348
                                           Sales
                                zdutchma
         1072
                u905v920w694
                                esmith
                                           Sales
                                                         East-421
         1076
                y347z204a710
                                fgarcia
                                           Finance
                                                        Central-270
         1078
                a667b270c984
                                sharley
                                           Sales
                                                        North-418
         1081
                d647e310f618
                               qcorbit
                                           Finance
                                                        South-290
         1083 I
                f840g812h544 |
                               gkoshi
                                         Finance
                                                        West-165
```

Retrieve all employees not in IT

(ariaDB [organ	izationl> select	· * from emr	olowes where NOT	<pre>department='Information Technology';</pre>
				++
employee_id	device_id	username	department	office
1000	a320b137c219	elarson	Marketing	East-170
1001	b239c825d303	bmoreno	Marketing	Central-276
1002	c116d593e558	tshah	Human Resources	North-434
1003	d394e816f943	sgilmore	Finance	South-153
1004	e218f877g788	eraab	Human Resources	South-127
1005	f551g340h864	gesparza	Human Resources	South-366
1007	h174i497j413	wjaffrey	Finance	North-406
1008	i858j583k571	abernard	Finance	South-170
1009	NULL	lrodriqu	Sales	South-134
1010	k2421212m542	jlansky	Finance	South-109
1011	1748m120n401	drosas	Sales	South-292
1015	p611q262r945	jsoto	Finance	North-271
1016	q793r736s288	sbaelish	Human Resources	North-229
1017	r550s824t230	jclark	Finance	North-188
1018	s310t540u653	abellmas	Finance	North-403
1020	u899v381w363	arutley	Marketing	South-351
1022	w237x430y567	arusso	Finance	West-465
1024	y976z753a267	iuduike	Sales	South-215
1025	z381a365b233	jhill	Sales	North-115
1026	a998b568c863	apatel	Human Resources	West-320
1027	b806c503d354	mrah	Marketing	West-246
1028	c603d749e374	aestrada	Human Resources	West-121
1029	d336e475f676	ivelasco	Finance	East-156
1030	e391f189q913	mabadi	Marketing	West-375
1031	f419q188h578	dkot	Marketing	West-408
1034	i679j565k940	bsand	Human Resources	East-484
1035	_	bisles	Sales	South-171
1036	k5501533m205	rjensen	Marketing	Central-239
1038	m873n636o225	btang	Human Resources	Central-260
1039	n253o917p623	cjackson	Sales	East-378
1040	o783p832q294	dtarly	Human Resources	East-237
1041		cgriffin		North-208
1042	-	acook	Human Resources	West-381
1044	s429t157u159	tbarnes	Finance	West-415
1045	t567u844v434	pwashing	Finance	East-115
1046	u429v921w138	daquino	Finance	West-280
1010	die JV Je iwi Ju	aaqarno	Limino	1000 000

Summary

The summary to this project is to provide you with insight into my ability to use SQL/PostgreSQL/MySQL efficiently. I will be including more files related to relational databases in my GitHub Portfolio.