

Apply Filters to SQL queries

Project description

In this project, I query a relational database using SQL queries involving filters and conditional statements. This querying is done in a security context, investigating potential security incidents and ensuring that the company's system is kept safe.

Retrieve after hours failed login attempts

Ran the following query to view failed login attempts (`success = 0`) that occurred after office hours (`login_time > '18:00'`):

```
SELECT *
FROM log_in_attempts
WHERE login_time > '18:00' AND success = 0;
```

```
MariaDB [organization]> SELECT *
-> FROM log_in_attempts
-> WHERE login_time > '18:00' AND success = 0;
```

event_id	username	login_date	login_time	country	ip_address	success
2	apatel	2022-05-10	20:27:27	CAN	192.168.205.12	0
18	pwashing	2022-05-11	19:28:50	US	192.168.66.142	0
20	tshah	2022-05-12	18:56:36	MEXICO	192.168.109.50	0
28	aestrada	2022-05-09	19:28:12	MEXICO	192.168.27.57	0
34	drosas	2022-05-11	21:02:04	US	192.168.45.93	0
42	cgriffin	2022-05-09	23:04:05	US	192.168.4.157	0
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	0
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	0
104	asundara	2022-05-11	18:38:07	US	192.168.96.200	0
107	bisles	2022-05-12	20:25:57	USA	192.168.116.187	0
111	aestrada	2022-05-10	22:00:26	MEXICO	192.168.76.27	0
127	abellmas	2022-05-09	21:20:51	CANADA	192.168.70.122	0
131	bisles	2022-05-09	20:03:55	US	192.168.113.171	0
155	cgriffin	2022-05-12	22:18:42	USA	192.168.236.176	0
160	jclark	2022-05-10	20:49:00	CANADA	192.168.214.49	0
199	yappiah	2022-05-11	19:34:48	MEXICO	192.168.44.232	0

19 rows in set (0.120 sec)

Retrieve login attempts on specific dates

Ran the following query to view login attempts that occurred on this day (login_date = '2022-05-09') and the day before (login_date = '2022-05-08'):

```
SELECT *  
FROM log_in_attempts  
WHERE login_date = '2022-05-09' OR login_date = '2022-05-08';
```

```
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	country	ip_address	success
1	jrafael	2022-05-09	04:56:27	CAN	192.168.243.140	1
3	dkot	2022-05-09	06:47:41	USA	192.168.151.162	1
4	dkot	2022-05-08	02:00:39	USA	192.168.178.71	0
8	bisles	2022-05-08	01:30:17	US	192.168.119.173	0
12	dkot	2022-05-08	09:11:34	USA	192.168.100.158	1
15	lyamamot	2022-05-09	17:17:26	USA	192.168.183.51	0
24	arusso	2022-05-09	06:49:39	MEXICO	192.168.171.192	1
25	sbaelish	2022-05-09	07:04:02	US	192.168.33.137	1
26	apatel	2022-05-08	17:27:00	CANADA	192.168.123.105	1
28	aestrada	2022-05-09	19:28:12	MEXICO	192.168.27.57	0
30	yappiah	2022-05-09	03:22:22	MEX	192.168.124.48	1
32	acook	2022-05-09	02:52:02	CANADA	192.168.142.239	0
36	asundara	2022-05-08	09:00:42	US	192.168.78.151	1
38	sbaelish	2022-05-09	14:40:01	USA	192.168.60.42	1
39	yappiah	2022-05-09	07:56:40	MEXICO	192.168.57.115	1
42	cgriffin	2022-05-09	23:04:05	US	192.168.4.157	0
43	mcouliba	2022-05-08	02:35:34	CANADA	192.168.16.208	0
44	daquino	2022-05-08	07:02:35	CANADA	192.168.168.144	0
47	dkot	2022-05-08	05:06:45	US	192.168.233.24	1
49	asundara	2022-05-08	14:00:01	US	192.168.173.213	0
53	nmason	2022-05-08	11:51:38	CAN	192.168.133.188	1
56	acook	2022-05-08	04:56:30	CAN	192.168.209.130	1
58	ivelasco	2022-05-09	17:20:54	CAN	192.168.57.162	0
61	dtanaka	2022-05-09	09:45:18	USA	192.168.98.221	1
65	aalonso	2022-05-09	23:42:12	MEX	192.168.52.37	1
66	aestrada	2022-05-08	21:58:32	MEX	192.168.67.223	1
67	abernard	2022-05-09	11:53:41	MEX	192.168.118.29	1
68	mrah	2022-05-08	17:16:13	US	192.168.42.248	1
70	tmitchel	2022-05-09	10:55:17	MEXICO	192.168.87.199	1
71	mcouliba	2022-05-09	06:57:42	CAN	192.168.55.169	0
72	alevitsk	2022-05-08	12:09:10	CANADA	192.168.139.176	1
79	abernard	2022-05-09	11:41:15	MEX	192.168.158.170	0
80	cjackson	2022-05-08	02:18:10	CANADA	192.168.33.140	1
83	lrodriqu	2022-05-08	08:10:23	USA	192.168.67.69	1
87	apatel	2022-05-08	22:38:31	CANADA	192.168.132.153	0
90	gesparza	2022-05-09	00:49:05	CANADA	192.168.87.201	0
92	pwashing	2022-05-08	00:36:12	US	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	US	192.168.145.158	0
102	jreckley	2022-05-09	16:51:44	MEX	192.168.108.13	1
108	daquino	2022-05-09	21:30:48	CANADA	192.168.15.110	1
110	mabadi	2022-05-09	00:01:54	USA	192.168.90.124	1
112	rjensen	2022-05-09	09:22:05	MEX	192.168.69.116	1
117	bsand	2022-05-08	00:19:11	USA	192.168.197.187	0
120	tmitchel	2022-05-09	02:58:17	MEXICO	192.168.134.62	0
127	abellmas	2022-05-09	21:20:51	CANADA	192.168.70.122	0
128	jclark	2022-05-09	10:45:59	CANADA	192.168.122.169	0
131	bisles	2022-05-09	20:03:55	US	192.168.113.171	0
134	iuduike	2022-05-09	06:46:40	USA	192.168.22.115	1
135	bsand	2022-05-09	14:06:33	US	192.168.91.238	0
144	daquino	2022-05-09	11:09:32	CANADA	192.168.139.9	0
145	ivelasco	2022-05-08	09:06:02	CANADA	192.168.39.196	1
147	yappiah	2022-05-08	06:04:34	MEX	192.168.65.245	0
148	daquino	2022-05-08	06:15:55	CANADA	192.168.135.6	1
150	nmason	2022-05-08	14:40:02	CAN	192.168.204.124	0
151	mabadi	2022-05-09	16:29:46	USA	192.168.30.225	1
158	smartell	2022-05-09	19:30:32	MEXICO	192.168.190.178	1
161	abellmas	2022-05-09	13:25:50	CAN	192.168.180.205	0
162	yappiah	2022-05-09	04:51:22	MEXICO	192.168.162.100	0
163	tmitchel	2022-05-08	09:21:16	MEX	192.168.119.29	0
165	jreckley	2022-05-08	15:28:43	MEXICO	192.168.34.193	0
168	jlansky	2022-05-08	13:25:42	USA	192.168.210.94	1
169	alevitsk	2022-05-08	08:10:43	CANADA	192.168.210.228	0
170	sbaelish	2022-05-09	16:43:18	USA	192.168.65.113	0
172	mabadi	2022-05-08	08:06:50	US	192.168.180.41	1
178	sgilmore	2022-05-08	12:27:22	CAN	192.168.52.216	0
184	alevitsk	2022-05-08	03:09:48	CAN	192.168.33.70	0
186	bisles	2022-05-09	04:29:17	USA	192.168.40.72	0
187	arusso	2022-05-09	00:36:26	MEX	192.168.77.137	0
189	nmason	2022-05-08	05:37:24	CANADA	192.168.168.117	1
190	jsoto	2022-05-09	05:09:21	USA	192.168.25.60	0
191	cjackson	2022-05-08	06:46:07	CANADA	192.168.7.187	0
193	lrodriqu	2022-05-08	07:11:29	US	192.168.125.240	0
197	jsoto	2022-05-08	09:05:09	US	192.168.36.21	0

75 rows in set (0.138 sec)

Retrieve login attempts outside of Mexico

Ran the following query to view login attempts that occurred outside of Mexico (WHERE NOT country LIKE 'MEX%'):

```
SELECT *
FROM log_in_attempts
WHERE NOT country LIKE 'MEX%';
```

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
2	apatel	2022-05-10	20:27:27	USA	192.168.205.12	0
3	dkot	2022-05-09	06:47:41	USA	192.168.151.162	1
4	dkot	2022-05-08	02:00:39	USA	192.168.178.71	0
5	jrafael	2022-05-11	03:05:59	CANADA	192.168.86.232	0
7	eraab	2022-05-11	01:45:14	CAN	192.168.170.243	1
8	bisles	2022-05-08	01:30:17	US	192.168.119.173	0
10	jrafael	2022-05-12	09:33:19	CANADA	192.168.228.221	0
11	sgillmore	2022-05-11	10:16:29	CANADA	192.168.140.81	0
12	dkot	2022-05-08	09:11:34	USA	192.168.100.158	1
13	mrh	2022-05-11	09:29:34	USA	192.168.246.135	1
14	sbaelish	2022-05-10	10:20:18	US	192.168.16.99	1
15	lyanamot	2022-05-09	17:17:26	USA	192.168.183.51	0
16	mcouliba	2022-05-11	06:44:22	CAN	192.168.172.189	1
17	pwashing	2022-05-11	02:33:02	USA	192.168.81.89	1
18	pwashing	2022-05-11	19:28:50	US	192.168.66.142	0
19	jhill	2022-05-12	13:09:04	US	192.168.142.245	1
21	iuduikie	2022-05-11	17:50:00	US	192.168.131.147	1
25	sbaelish	2022-05-09	07:04:02	US	192.168.33.137	1
26	apatel	2022-05-08	17:27:00	CANADA	192.168.123.105	1
29	bisles	2022-05-11	01:21:22	US	192.168.85.186	0
31	acook	2022-05-12	17:36:45	CANADA	192.168.58.232	0
32	acook	2022-05-09	02:52:02	CANADA	192.168.142.239	0
33	zbernal	2022-05-11	02:52:10	US	192.168.72.59	1
34	drosas	2022-05-11	21:02:04	US	192.168.45.93	0
36	asundara	2022-05-08	09:00:42	US	192.168.78.151	1
37	eraab	2022-05-10	06:03:41	CANADA	192.168.152.148	0
38	sbaelish	2022-05-09	14:40:01	USA	192.168.60.42	1
41	apatel	2022-05-10	17:39:42	CANADA	192.168.46.207	0
42	cgriiffin	2022-05-09	23:04:05	US	192.168.4.157	0
43	mcouliba	2022-05-08	02:35:34	CANADA	192.168.16.208	0
44	daquino	2022-05-08	07:02:35	CANADA	192.168.168.144	0
45	dtanaka	2022-05-11	10:28:54	US	192.168.222.157	1
46	eraab	2022-05-11	11:29:27	CAN	192.168.24.12	1
47	dkot	2022-05-08	05:06:45	US	192.168.233.24	1
48	asundara	2022-05-11	03:18:45	USA	192.168.72.10	1
49	asundara	2022-05-08	14:00:01	US	192.168.173.213	0
50	jcclark	2022-05-10	10:48:02	CANADA	192.168.174.117	0
51	jrafael	2022-05-10	22:40:01	CANADA	192.168.148.115	1
52	cjackson	2022-05-10	22:07:07	CAN	192.168.58.57	0
53	nmason	2022-05-08	11:51:38	CAN	192.168.133.188	1
55	jlansky	2022-05-11	05:15:34	US	192.168.6.170	0
56	acook	2022-05-08	04:56:30	CAN	192.168.209.130	1
57	asundara	2022-05-12	21:13:02	US	192.168.211.201	1
58	ivelasco	2022-05-09	17:20:54	CAN	192.168.27.152	0
60	acook	2022-05-11	21:46:00	CAN	192.168.54.45	1
61	dtanaka	2022-05-09	09:45:18	USA	192.168.98.221	1
64	apatel	2022-05-10	22:00:09	CANADA	192.168.172.71	1
68	mrh	2022-05-08	17:16:13	US	192.168.42.248	1
69	wjaffrey	2022-05-11	19:55:15	USA	192.168.100.17	0
71	mcouliba	2022-05-09	06:57:42	CAN	192.168.55.169	0
72	alevitsk	2022-05-08	12:09:10	CANADA	192.168.139.176	1
73	zbernal	2022-05-10	17:46:45	USA	192.168.80.46	0
74	nmason	2022-05-11	15:55:48	CAN	192.168.162.2	1
75	zbernal	2022-05-12	04:14:35	US	192.168.188.83	1
76	bmoreno	2022-05-10	10:53:55	CAN	192.168.61.200	0
77	wjaffrey	2022-05-12	08:37:59	US	192.168.106.183	1
80	cjackson	2022-05-08	02:18:10	CANADA	192.168.33.140	1
83	lrodriugu	2022-05-08	08:10:23	USA	192.168.67.69	1
84	jrafael	2022-05-11	09:26:17	CAN	192.168.243.203	1
86	dtanaka	2022-05-10	10:22:20	USA	192.168.197.135	1
87	apatel	2022-05-08	22:38:31	CANADA	192.168.132.153	0
89	dkot	2022-05-12	10:52:00	USA	192.168.128.75	1
90	gesparza	2022-05-09	00:49:05	CANADA	192.168.87.201	1
91	jhill	2022-05-11	17:46:47	US	192.168.172.74	1
92	pwashing	2022-05-08	00:36:12	US	192.168.247.219	0
96	ivelasco	2022-05-09	22:36:36	CAN	192.168.84.194	0
98	gesparza	2022-05-11	06:30:14	CANADA	192.168.148.80	0
99	mcouliba	2022-05-12	11:54:14	CANADA	192.168.218.160	1
101	sbaelish	2022-05-08	12:01:22	US	192.168.145.158	0
103	jhill	2022-05-11	09:10:54	US	192.168.60.153	0
104	asundara	2022-05-11	18:38:07	US	192.168.96.200	0
105	cjackson	2022-05-12	19:36:42	CAN	192.168.247.153	1
107	bisles	2022-05-12	20:25:57	USA	192.168.116.187	0
108	daquino	2022-05-09	21:30:48	CANADA	192.168.15.110	1
109	mcouliba	2022-05-10	04:43:15	CANADA	192.168.39.246	1
110	mabadi	2022-05-09	00:01:54	USA	192.168.90.124	1
113	gesparza	2022-05-10	00:40:00	CAN	192.168.64.133	0
115	ivelasco	2022-05-10	23:06:01	CAN	192.168.154.1	1

117	bsand	2022-05-08	00:19:11	USA	192.168.197.187	0
121	btang	2022-05-10	22:00:36	US	192.168.80.143	1
123	bmoreno	2022-05-10	04:43:30	CANADA	192.168.98.2	1
124	asundara	2022-05-12	10:51:21	USA	192.168.136.29	1
125	bisles	2022-05-11	08:36:19	US	192.168.74.9	1
126	jrafael	2022-05-12	18:47:52	CAN	192.168.22.16	1
127	abellmas	2022-05-09	21:20:51	CANADA	192.168.70.122	0
128	jcclark	2022-05-09	10:45:59	CANADA	192.168.122.169	0
129	drosas	2022-05-12	15:39:40	USA	192.168.152.200	0
130	mrh	2022-05-11	02:54:21	USA	192.168.102.147	0
131	bisles	2022-05-09	20:03:55	US	192.168.113.171	0
133	asundara	2022-05-12	05:57:04	USA	192.168.6.9	1
134	iuduikie	2022-05-09	06:46:40	USA	192.168.22.115	1
135	bsand	2022-05-09	14:06:33	US	192.168.91.238	0
136	mabadi	2022-05-10	06:56:44	US	192.168.214.234	1
137	jrafael	2022-05-12	02:42:37	CAN	192.168.186.176	1
139	apatel	2022-05-11	01:54:36	CAN	192.168.95.222	0
140	btang	2022-05-10	13:17:29	US	192.168.249.111	0
141	btang	2022-05-12	10:12:03	USA	192.168.82.139	0
142	gesparza	2022-05-11	06:31:14	CANADA	192.168.117.56	1
143	jhill	2022-05-11	00:30:22	USA	192.168.189.19	0
144	daquino	2022-05-09	11:09:32	CANADA	192.168.139.9	0
145	ivelasco	2022-05-08	09:06:02	CANADA	192.168.39.196	1
146	nmason	2022-05-10	02:25:55	CANADA	192.168.37.147	0
148	daquino	2022-05-08	06:15:55	CANADA	192.168.135.6	1
149	jlansky	2022-05-11	01:07:11	USA	192.168.238.42	0
150	nmason	2022-05-08	14:40:02	CAN	192.168.204.124	0
151	mabadi	2022-05-09	16:29:46	USA	192.168.30.225	1
152	mabadi	2022-05-12	10:24:43	USA	192.168.96.244	0
154	jlansky	2022-05-12	10:57:35	US	192.168.23.63	1
155	cgriiffin	2022-05-12	22:18:42	USA	192.168.236.176	0
156	btang	2022-05-11	17:08:51	USA	192.168.243.95	0
159	iuduikie	2022-05-12	16:59:50	USA	192.168.220.115	0
160	jcclark	2022-05-10	20:49:00	CANADA	192.168.214.49	0
161	abellmas	2022-05-09	13:25:50	CAN	192.168.180.205	0
164	jcclark	2022-05-12	21:15:52	CAN	192.168.18.34	1
167	jcclark	2022-05-12	15:47:45	CAN	192.168.146.51	1
168	jlansky	2022-05-08	13:25:42	USA	192.168.210.94	1
169	alevitsk	2022-05-08	08:10:43	CANADA	192.168.210.228	0
170	sbaelish	2022-05-09	16:43:18	USA	192.168.65.113	0
171	drosas	2022-05-10	16:32:55	USA	192.168.92.218	0
172	mabadi	2022-05-08	08:06:50	US	192.168.180.41	1
173	asundara	2022-05-12	23:17:52	US	192.168.58.217	1
174	lyanamot	2022-05-10	12:26:27	US	192.168.228.122	0
175	jhill	2022-05-10	00:17:09	USA	192.168.130.218	0
177	wjaffrey	2022-05-11	00:15:55	USA	192.168.144.165	0
178	sgillmore	2022-05-08	12:27:22	CAN	192.168.52.216	0
179	jcclark	2022-05-12	04:08:17	CAN	192.168.232.93	0
181	abellmas	2022-05-10	13:37:05	CAN	192.168.60.111	0
182	lyanamot	2022-05-10	06:01:31	USA	192.168.106.52	0
183	nmason	2022-05-11	05:29:36	CANADA	192.168.137.147	0
184	alevitsk	2022-05-08	03:09:48	CAN	192.168.33.70	0
185	jsoto	2022-05-10	13:34:58	USA	192.168.151.91	0
186	bisles	2022-05-09	04:29:17	USA	192.168.40.72	0
188	jsoto	2022-05-11	00:39:09	USA	192.168.21.88	0
189	nmason	2022-05-08	05:37:24	CANADA	192.168.168.117	1
190	jsoto	2022-05-09	05:09:21	USA	192.168.25.60	0
191	cjackson	2022-05-08	06:46:07	CANADA	192.168.7.187	0
192	bisles	2022-05-10	08:32:03	USA	192.168.201.40	1
193	lrodriugu	2022-05-08	07:11:29	US	192.168.125.240	0
194	jcclark	2022-05-12	14:11:04	CAN	192.168.197.247	0
195	alevitsk	2022-05-11	06:59:13	CANADA	192.168.236.78	1
196	acook	2022-05-10	09:56:48	CAN	192.168.52.90	0
197	jsoto	2022-05-08	09:05:09	US	192.168.36.21	0
200	jcclark	2022-05-12	01:11:45	CANADA	192.168.91.103	1

144 rows in set (0.001 sec)

Retrieve employees in Marketing

Ran the following query to identify employees in the Marketing department (department = 'Marketing') who work in the East office (office LIKE 'East%').

```
SELECT *  
FROM employees  
WHERE department = 'Marketing' AND office LIKE 'East%';
```

```
MariaDB [organization]> 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	k865l965m233	rgosh	Marketing	East-157
1103	NULL	randerss	Marketing	East-460
1156	a184b775c707	dellery	Marketing	East-417
1163	h679i515j339	cwilliam	Marketing	East-216

```
7 rows in set (0.097 sec)
```

Retrieve employees in Finance or Sales

Ran the following query to identify employees that are either in the Finance or Sales departments (WHERE department = 'Finance' OR department = 'Sales').

```
SELECT *  
FROM employees  
WHERE department = 'Finance' OR department = 'Sales';
```

```
MariaDB [organization]> SELECT *  
-> FROM employees  
-> WHERE department = 'Finance' OR department = 'Sales';  
+-----+-----+-----+-----+-----+  
| employee_id | device_id | username | department | office |  
+-----+-----+-----+-----+-----+  
| 1003 | d394e816f943 | sgillmore | Finance | South-153 |  
| 1007 | h174i497j413 | wjaffrey | Finance | North-406 |  
| 1008 | i858j583k571 | abernard | Finance | South-170 |  
| 1009 | NULL | lrodrigu | Sales | South-134 |  
| 1010 | k242l212m542 | jlansky | Finance | South-109 |  
| 1011 | l748m120n401 | drossas | Sales | South-292 |  
| 1015 | p611q262r945 | jtoote | Finance | North-271 |  
| 1017 | t550a824t230 | jclark | Finance | North-188 |  
| 1018 | s310t540u653 | abellmas | Finance | North-403 |  
| 1022 | w237x430y567 | arussao | Finance | West-465 |  
| 1024 | y976z753a267 | lduike | Sales | South-215 |  
| 1025 | z381a365b233 | jhill | Sales | North-115 |  
| 1029 | d336e475f676 | ivelasco | Finance | East-156 |  
| 1035 | j236k303l245 | bisles | Sales | South-171 |  
| 1039 | n253p917p623 | cjackson | Sales | East-378 |  
| 1041 | p928q222r778 | cgriffin | Sales | North-208 |  
| 1044 | s429t157u159 | tbarnes | Finance | West-415 |  
| 1045 | t567u844v434 | pwashing | Finance | East-115 |  
| 1046 | u429v921w138 | daquino | Finance | West-280 |  
| 1047 | v109w587x644 | cward | Finance | West-373 |  
| 1048 | w167x592y375 | tmtchel | Finance | South-288 |  
| 1049 | NULL | jreckley | Finance | Central-295 |  
| 1050 | y132z930a114 | csimmons | Finance | North-468 |  
| 1057 | f370g535h632 | mscott | Sales | South-270 |  
| 1062 | k367l639m697 | redwards | Finance | North-180 |  
| 1063 | l686m140n569 | lpope | Sales | East-226 |  
| 1066 | o678p794q957 | ttyrell | Sales | Central-444 |  
| 1069 | NULL | jpark | Finance | East-110 |  
| 1071 | t244u829v723 | zdutchma | Sales | West-348 |  
| 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 | f840g812h544 | qhoshi | Finance | West-165 |  
| 1085 | h339i498j269 | cperaz | Sales | East-325 |  
| 1086 | i281j129k749 | lmajumda | Sales | West-499 |  
| 1089 | l358m929n154 | jpark2 | Sales | West-251 |  
| 1091 | n378o313p469 | rtran | Sales | Central-230 |  
| 1092 | o391p779q935 | lpark | Sales | West-227 |  
| 1098 | u671v146w618 | tarchamb | Sales | North-423 |  
| 1099 | v283w690x104 | anaser | Finance | West-357 |  
| 1105 | b551c837d758 | kmei | Finance | Central-232 |  
| 1107 | d168f758g876 | akajwara | Sales | North-471 |  
| 1109 | f228g533h679 | nlocklea | Sales | East-196 |  
| 1110 | g567h376i314 | pchaudhu | Sales | Central-428 |  
| 1111 | h835i179j862 | jlee | Sales | West-309 |  
| 1116 | m272n572o874 | nzhao | Sales | South-100 |  
| 1117 | n683o758p820 | dahmad | Sales | West-405 |  
| 1118 | o305p208q337 | jpark3 | Sales | South-329 |  
| 1119 | p164q780r999 | omubarak | Sales | West-409 |  
| 1121 | r628s557t397 | mrojas | Sales | East-288 |  
| 1122 | s103t952u851 | btorres | Finance | West-319 |  
| 1130 | a317b635c465 | tsnow | Sales | Central-451 |  
| 1136 | q298h520i457 | jhaves | Finance | West-416 |  
| 1138 | l671j355k725 | sromero | Finance | South-329 |  
| 1142 | m674n127o823 | lsilva | Finance | East-440 |  
| 1144 | NULL | erobinso | Finance | Central-266 |  
| 1147 | r454a225t299 | tvega | Finance | West-177 |  
| 1148 | s328t505u907 | dharvey | Finance | South-181 |  
| 1159 | d881e710f732 | jshen | Finance | East-193 |  
| 1164 | i682j513k442 | fsmeltz | Finance | North-163 |  
| 1169 | NULL | mmitchel | Sales | Central-250 |  
| 1174 | s371t911u987 | eortiz | Finance | North-428 |  
| 1175 | t959u687v394 | jclark2 | Finance | North-194 |  
| 1176 | u849v569w521 | nliu | Sales | West-220 |  
| 1181 | z803a233b718 | sessa | Finance | South-207 |  
| 1185 | d790e839f461 | revens | Sales | North-330 |  
| 1186 | e281f433g404 | sacosta | Sales | North-460 |  
| 1187 | f963g637h851 | bbode | Finance | East-351 |  
| 1188 | g164h566i795 | noshiro | Finance | West-252 |  
| 1195 | n516o853p957 | orainier | Finance | East-346 |  
+-----+-----+-----+-----+-----+  
71 rows in set (0.001 sec)
```

Retrieve all employees not in IT

Ran the following query to view all employees not in the IT department (WHERE NOT department = 'Information Technology').

```
SELECT *  
FROM employees  
WHERE NOT department = 'Information Technology';
```

MariaDB [organization]> SELECT * -> FROM employees -> WHERE NOT department = 'Information Technology';				
employee_id	device_id	username	department	office
1000	a320b137c219	elerson	Marketing	East-170
1001	b239c825d303	lmoreno	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	i893j583k571	abernard	Finance	South-170
1009	NULL	lrodriq	Sales	South-134
1010	k242i212m542	jlanasky	Finance	South-109
1011	l748m120n401	drosas	Sales	South-292
1015	pe11j262r945	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	v227x430y567	crusso	Finance	West-465
1024	y976z953a267	audrike	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	e391f189g913	mabadi	Marketing	West-375
1031	f419g188h578	dkot	Marketing	West-408
1034	h679j565k940	bsand	Human Resources	East-484
1035	i226k301l245	bioles	Sales	South-171
1036	k550l523m205	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	p929q222r778	cgirffin	Sales	North-208
1042	q175r338s833	acook	Human Resources	West-381
1044	s429t517u159	tbarnes	Finance	West-415
1045	t567u844v434	pwashing	Finance	East-115
1046	u422v921w138	daquino	Finance	West-280
1047	v109w587x644	cward	Finance	West-373
1048	w167x592y375	lmitchel	Finance	South-288
1049	NULL	jreckley	Finance	Central-295
1050	y132z930a114	csimmons	Finance	North-468
1051	z451a308b518	itraora	Marketing	Central-134
1052	a192b174c940	jdarosa	Marketing	East-195
1053	b979c871d361	nenmanue	Human Resources	Central-259
1055	d831e972f553	awilliam	Marketing	Central-256
1056	e782f537g683	ankala	Marketing	North-139
1057	f370g535h632	macott	Sales	South-270
1058	g264h852i697	madebowa	Marketing	South-119
1059	h832j322k795	jnguyen	Marketing	South-255
1061	j255k281l925	nherah	Human Resources	East-163
1062	k367l639m697	redwards	Finance	North-180
1063	l686m140n569	lpope	Sales	East-226
1064	NULL	ejones	Marketing	South-477
1065	n428o322p522	imoore	Human Resources	West-490
1066	o678p794q577	ttzyrell	Sales	Central-444
1067	p288q432r721	lwhite	Marketing	North-277
1069	NULL	jpark	Finance	East-110
1070	r772t175u409	tbailey	Human Resources	North-204
1071	t244u829v723	zdutchma	Sales	West-348
1072	u905v920w694	esmith	Sales	East-421
1073	v135w241x773	srobinso	Marketing	Central-494
1075	x573y883z772	fbautist	Marketing	East-267
1076	y347z204a710	fgarcia	Finance	Central-270
1077	z654a154b259	ldavis	Human Resources	East-241
1078	a667b270c984	sharley	Sales	North-418
1079	b423c245d868	qmedina	Marketing	North-456
1080	c568d742e974	gmoon	Marketing	North-156
1081	d647e310f618	qcorbit	Finance	South-290
1083	f840g812h544	qkoshi	Finance	West-165
1084	g950h972i991	nhuyhn	Human Resources	South-155
1085	h339i498j269	cperez	Sales	East-325
1086	i281j129k749	lmajumda	Sales	West-499
1088	k865l965m233	rgosh	Marketing	East-157
1089	l358m929n154	jpark2	Sales	West-251
1091	n378o13p469	rtian	Sales	Central-230
1092	o391p779q935	lpark	Sales	West-227
1093	p765q957r699	etargary	Human Resources	Central-247
1097	t363u179v368	jlee	Human Resources	South-254
1098	u671v146w618	tarchamb	Sales	North-423
1099	v283w690x104	anaser	Finance	West-357
1100	w326x611y598	mjin	Human Resources	Central-371
1101	x701y250z303	ichowdh	Human Resources	East-233
1102	y842z930a241	kaelassi	Marketing	South-378
1103	NULL	randeras	Marketing	East-460
1105	b551c837d758	kmei	Finance	Central-232
1106	c597d792e215	jcohen	Marketing	South-395
1107	d168e758f876	akjwara	Sales	North-471
1108	e113f288g203	jwashing	Human Resources	North-226
1109	f229g533h679	nlocklea	Sales	East-196
1110	g567h376i314	pechaudh	Sales	Central-428
1111	h335i199j862	jlee	Sales	West-309
1113	j781k420l510	pjalmas	Human Resources	East-366
1114	NULL	xgreene	Marketing	North-335
1116	m272n572o874	nzhao	Sales	South-100
1117	n630p758q820	dahmad	Sales	West-405
1118	o305p208g337	jpark3	Sales	South-329
1119	p164q780r999	omubarak	Sales	West-409
1120	q912r119s313	rbradsha	Marketing	Central-200
1121	r528s573t397	mroya	Marketing	South-490
1122	s103t952u851	btorres	Finance	West-319
1123	t479u468v151	ekonya	Human Resources	South-445
1124	u340v931w764	claw	Human Resources	Central-172
1125	v916w538x421	mrogers	Marketing	South-166
1128	y101x561a449	mpirato	Human Resources	West-205
1129	z566a147b347	piopez	Marketing	West-326
1130	a317b635c465	tsnow	Sales	Central-451
1132	c150d982e144	credy	Human Resources	Central-210
1133	d693e31f221	pfrey	Marketing	Central-164
1134	e395f616g566	akhatri	Human Resources	West-159
1136	g299h520i457	jhawes	Finance	West-416
1137	h169j539k692	moed	Human Resources	South-166
1138	i671j355k725	svomero	Finance	South-399
1139	j637k986l199	emorton	Human Resources	North-300
1140	k982l199m839	apatel2	Human Resources	East-385
1141	l282m821n717	cocoba	Human Resources	South-282
1142	m741o176p823	laivia	Finance	East-440
1144	NULL	erobinas	Finance	Central-266
1145	p752q137r169	msosa	Human Resources	South-345
1146	q228r135s755	ulmerez	Human Resources	Central-171
1147	r454s254t299	tsvea	Finance	West-177
1148	s328t505u907	dharvey	Finance	South-181
1150	u554v512w139	lmarin	Marketing	Central-364
1151	v852w513x954	shah	Human Resources	North-272
1152	NULL	william	Marketing	Central-170
1153	x677y330z296	ncardena	Marketing	Central-363
1154	y765z123a548	obryand	Marketing	North-182
1155	z942a966b589	rjones	Human Resources	East-122
1156	a184b775c707	dellery	Marketing	East-417
1157	b264c773d977	lstein	Human Resources	Central-343
1158	c406d877e950	bnaser	Human Resources	Central-243
1159	d881e710f732	jben	Finance	East-193
1160	e127f591g924	sphas	Marketing	West-353
1163	h679i515j339	cwilliam	Marketing	East-216
1164	i682j513k442	fsmetlz	Finance	North-163
1165	j713k893l832	nwords	Marketing	South-128
1166	k495l224m708	nyoung	Marketing	Central-397
1167	l738m922n515	tblackwe	Marketing	North-443
1169	NULL	mmitchel	Sales	Central-250
1170	o156p302q359	lalvarez	Human Resources	North-278
1172	q728r364s628	aham	Marketing	Central-260
1173	r537s849t690	ialcazar	Marketing	South-429
1174	s371t911u987	eoertiz	Finance	North-428
1175	t959u687v394	jcclark2	Finance	North-194
1176	u849v569w521	nliu	Sales	West-220
1177	v691w183x928	aazra	Human Resources	East-190
1178	w986x187y885	nlannist	Marketing	North-196
1179	x174y934z376	asalas	Human Resources	North-445
1180	y131z211a578	medwards	Human Resources	Central-340
1181	z803a233b718	seasa	Finance	South-207
1183	b566c710d544	lquraish	Human Resources	East-400
1184	c986d200e170	ptsoele	Human Resources	Central-247
1185	d790e839f461	revens	Sales	North-330
1186	e281f433g404	sacosta	Sales	North-460
1187	f963g637h851	hbode	Finance	East-351
1188	g164h566i795	noshiro	Finance	West-252
1189	h784i1120j837	alefowei	Human Resources	West-342
1190	NULL	kcarter	Marketing	Central-270
1191	NULL	shakimi	Marketing	Central-366
1194	m340n267o441	zwarren	Human Resources	West-212
1195	n160o839p957	ocanier	Finance	East-246
1198	q308r573s459	jmartine	Marketing	South-117
1199	r520s571t459	areyes	Human Resources	East-100

Summary

Through a series of SQL queries involving filters and conditional statements, we reviewed failed login attempts that occurred after hours, on specific dates, and outside of a specific

country. Within the employees table, we retrieved a list of those who work in Marketing and are located in a specific building, those who work in Finance OR Sales, and those NOT in the IT department. Everything was accomplished by stringing together filters on the WHERE line of the query, using LIKE to find matches to the provided search term, and occasionally using the '%' wildcard sign to expand our returned results.