Activity: Complete a SQL join

Activity overview

As a security analyst, you'll often find that you need data from more than one table.

Previously, you learned that a **relational database** is a structured database containing tables that are related to each other.

SQL joins enable you to combine tables that contain a shared column. This is helpful when you need to connect information that appears in different tables.

In this lab activity, you'll use SQL joins to connect separate tables and retrieve needed information.

Get ready to apply what you've learned and **join** some data!

*Note: The terms **row** and **record** are used interchangeably.*

Scenario

In this scenario, you'll investigate a recent security incident that compromised some machines.

You are responsible for getting the required information from the database for the investigation.

Here's how you'll do this task: **First**, you'll use an inner join to identify which employees are using which machines. **Second**, you'll use left and right joins to find machines that do not belong to any specific user and users who do not have any specific machine assigned to them. **Finally**, you'll use an inner join to list all login attempts made by all employees.

You're ready to join tables in SQL!

Note: In this lab you'll be working with the organization database and the tables it contains. The lab starts with the organization database in the MariaDB shell that is already open. This means you can start with the tasks as soon as you click the ***Start Lab*** *button.*
If you unintentionally exit the organization database in the MariaDB shell, you can reconnect by running the `sudo mysql organization` *command.*
Disclaimer: For optimal performance and compatibility, it is recommended to use either **Google Chrome** or **Mozilla Firefox** browsers while accessing the labs.

Start your lab

Before you begin, you can review the instructions for using the Qwiklabs platform under the **Resources** tab in Coursera.

If you haven't already done so, click **Start Lab**. This brings up the terminal so that you can begin completing the tasks!

When you have completed all the tasks, refer to the **End your Lab** section that follows the tasks for information on how to end your lab.

Task 1. Match employees to their machines

First, you must identify which employees are using which machines. The data is located in the `machines` and `employees` tables.

You must use a SQL inner join to return the records you need based on a connecting column. In the scenario, both tables include the `device_id` column, which you'll use to perform the join.

1. Run the following query to retrieve all records from the `machines` table:

```
SELECT *
FROM machines;
```
Copied!

You'll note that this query is not sufficient to perform the join and retrieve the information you need.

2. Complete the query to perform an inner join between the `machines` and `employees` tables on the `device_id` column.
   Replace X and Y with this column name:

```
SELECT *
FROM machines
INNER JOIN employees ON machines.X = employees.Y;
```
Copied!

*Note: Placing the `employees` table after `INNER JOIN` makes it the right table.***Note:** *If the output of the query is too wide for your shell, press the* **Open Linux Console** *button described in the Lab features section to open a full-screen view of the Bash shell, where you can re-enter the query.*

How many rows did the inner join return?

85

132

124

check185

Click **Check my progress** to verify that you have completed this task correctly.

You have completed this task and identified which employees are using which machines using INNER JOIN.

Match employees to their machines

You have completed this task and identified which employees are using which machines using INNER JOIN.

```
MariaDB [organization]> SELECT *
    -> FROM machines;
+--------------+------------------+---------------+---------------+-------------+
| device_id    | operating_system | email_client  | OS_patch_date | employee_id |
+--------------+------------------+---------------+---------------+-------------+
| a184b775c707 | OS 1             | Email Client 1 | 2021-09-01   |        1156 |
| a192b174c940 | OS 2             | Email Client 1 | 2021-06-01   |        1052 |
| a305b818c708 | OS 3             | Email Client 2 | 2021-06-01   |        1182 |
| a317b635c465 | OS 1             | Email Client 2 | 2021-03-01   |        1130 |
| a320b137c219 | OS 2             | Email Client 2 | 2021-03-01   |        1000 |
| a398b471c573 | OS 3             | Email Client 2 | 2021-12-01   |           0 |
| a667b270c984 | OS 1             | Email Client 1 | 2021-03-01   |        1078 |
| a821b452c176 | OS 2             | Email Client 2 | 2021-12-01   |        1104 |
| a998b568c863 | OS 3             | Email Client 1 | 2021-12-01   |        1026 |
| b157c491d493 | OS 2             | Email Client 1 | 2021-03-01   |           0 |
| b239c825d303 | OS 1             | Email Client 1 | 2021-03-01   |        1001 |
| b264c773d977 | OS 2             | Email Client 2 | 2021-03-01   |        1157 |
| b265c937d713 | OS 2             | Email Client 1 | 2021-09-01   |        1131 |
| b433c245d868 | OS 1             | Email Client 1 | 2021-06-01   |        1079 |
| b551c837d758 | OS 3             | Email Client 1 | 2021-03-01   |        1105 |
| b566c710d544 | OS 1             | Email Client 1 | 2021-06-01   |        1183 |
| b806c503d354 | OS 2             | Email Client 1 | 2021-12-01   |        1027 |
| b979c871d361 | OS 2             | Email Client 1 | 2021-03-01   |        1053 |
| c116d593e558 | OS 3             | Email Client 1 | 2021-09-01   |        1002 |
| c150d982e144 | OS 2             | Email Client 2 | 2021-06-01   |        1132 |
| c185d679e493 | OS 1             | Email Client 2 | 2021-09-01   |           0 |
```

c406d877e950	OS 2	Email Client 1	2021-06-01	1158
c547d140e477	OS 2	Email Client 1	2021-03-01	1054
c568d742e974	OS 2	Email Client 2	2021-09-01	1080
c597d792e215	OS 2	Email Client 1	2021-09-01	1106
c603d749e374	OS 1	Email Client 1	2021-12-01	1028
c986d200e170	OS 2	Email Client 2	2021-09-01	1184
d168e758f876	OS 2	Email Client 1	2021-09-01	1107
d280e557f635	OS 3	Email Client 1	2021-03-01	0
d336e475f676	OS 2	Email Client 2	2021-06-01	1029
d394e816f943	OS 3	Email Client 2	2021-03-01	1003
d647e310f618	OS 2	Email Client 2	2021-06-01	1081
d693e351f221	OS 2	Email Client 2	2021-09-01	1133
d790e839f461	OS 1	Email Client 1	2021-06-01	1185
d831e972f553	OS 1	Email Client 1	2021-09-01	1055
d881e710f732	OS 3	Email Client 2	2021-03-01	1159
e113f288g203	OS 2	Email Client 2	2021-03-01	1108
e121f951g937	OS 3	Email Client 2	2021-06-01	0
e127f591g924	OS 3	Email Client 2	2021-12-01	1160
e218f877g788	OS 2	Email Client 1	2021-09-01	1004
e281f433g404	OS 1	Email Client 2	2021-12-01	1186
e301f659g551	OS 3	Email Client 2	2021-12-01	1082
e391f189g913	OS 3	Email Client 2	2021-12-01	1030
e395f616g566	OS 2	Email Client 2	2021-03-01	1134
e782f537g683	OS 1	Email Client 1	2021-03-01	1056
f117g394h201	OS 1	Email Client 2	2021-03-01	0
f229g533h679	OS 2	Email Client 2	2021-03-01	1109

f370g535h632	OS 2	Email Client 2	2021-09-01	1057
f419g188h578	OS 1	Email Client 1	2021-06-01	1031
f551g340h864	OS 3	Email Client 2	2021-12-01	1005
f840g812h544	OS 1	Email Client 2	2021-12-01	1083
f934g229h883	OS 2	Email Client 2	2021-03-01	1135
f951g408h866	OS 1	Email Client 2	2021-03-01	1161
f963g637h851	OS 1	Email Client 1	2021-06-01	1187
g164h566i795	OS 1	Email Client 1	2021-09-01	1188
g264h852i697	OS 3	Email Client 1	2021-03-01	1058
g299h520i457	OS 2	Email Client 1	2021-09-01	1136
g329h357i597	OS 1	Email Client 2	2021-06-01	1006
g567h376i314	OS 3	Email Client 1	2021-12-01	1110
g770h829i938	OS 2	Email Client 1	2021-09-01	0
g773h303i639	OS 2	Email Client 2	2021-12-01	1032
g950h972i991	OS 2	Email Client 1	2021-12-01	1084
g953h643i618	OS 2	Email Client 2	2021-06-01	1162
h165i539j638	OS 3	Email Client 1	2021-03-01	1137
h174i497j413	OS 2	Email Client 1	2021-03-01	1007
h339i498j269	OS 1	Email Client 1	2021-03-01	1085
h679i515j339	OS 3	Email Client 1	2021-09-01	1163
h784i120j837	OS 3	Email Client 2	2021-12-01	1189
h832i322j795	OS 1	Email Client 1	2021-09-01	1059
h835i179j862	OS 2	Email Client 2	2021-06-01	1111
i281j129k749	OS 3	Email Client 1	2021-06-01	1086
i446j874k974	OS 3	Email Client 1	2021-03-01	1060
i671j355k725	OS 2	Email Client 2	2021-03-01	1138

i679j565k940	OS 1	Email Client 1	2021-03-01	1034
i682j513k442	OS 3	Email Client 1	2021-03-01	1164
i772j807k175	OS 2	Email Client 1	2021-12-01	1112
i858j583k571	OS 2	Email Client 2	2021-06-01	1008
j236k303l245	OS 1	Email Client 1	2021-12-01	1035
j255k281l925	OS 3	Email Client 1	2021-06-01	1061
j637k986l199	OS 2	Email Client 1	2021-06-01	1139
j713k893l832	OS 2	Email Client 1	2021-03-01	1165
j781k420l510	OS 1	Email Client 1	2021-09-01	1113
j803k645l251	OS 2	Email Client 1	2021-12-01	1087
k242l212m542	OS 1	Email Client 1	2021-03-01	1010
k367l639m697	OS 1	Email Client 1	2021-12-01	1062
k495l234m708	OS 1	Email Client 2	2021-09-01	1166
k550l533m205	OS 3	Email Client 2	2021-09-01	1036
k570l183m949	OS 3	Email Client 1	2021-12-01	1192
k865l965m233	OS 3	Email Client 2	2021-12-01	1088
k982l199m839	OS 2	Email Client 2	2021-03-01	1140
l186m618n319	OS 1	Email Client 2	2021-12-01	1193
l282m821n717	OS 1	Email Client 1	2021-12-01	1141
l358m929n154	OS 3	Email Client 2	2021-03-01	1089
l552m734n118	OS 2	Email Client 2	2021-03-01	1115
l686m140n569	OS 3	Email Client 2	2021-12-01	1063
l693m585n528	OS 3	Email Client 1	2021-06-01	1037
l738m922n515	OS 1	Email Client 1	2021-03-01	1167
l748m120n401	OS 3	Email Client 1	2021-09-01	1011
m272n572o874	OS 3	Email Client 2	2021-09-01	1116

m340n287o441	OS 2	Email Client 2	2021-09-01	1194
m674n127o823	OS 3	Email Client 2	2021-03-01	1142
m756n668o146	OS 1	Email Client 2	2021-09-01	1012
m778n920o426	OS 2	Email Client 2	2021-06-01	1168
m873n636o225	OS 1	Email Client 2	2021-06-01	1038
m891n748o375	OS 2	Email Client 2	2021-12-01	1090
n205o559p243	OS 1	Email Client 2	2021-06-01	1013
n253o917p623	OS 1	Email Client 2	2021-09-01	1039
n378o313p469	OS 3	Email Client 2	2021-12-01	1091
n428o322p522	OS 1	Email Client 1	2021-12-01	1065
n516o853p957	OS 1	Email Client 1	2021-09-01	1195
n683o758p820	OS 2	Email Client 1	2021-12-01	1117
n704o364p471	OS 2	Email Client 2	2021-09-01	1143
o156p302q359	OS 2	Email Client 1	2021-03-01	1170
o225p357q829	OS 3	Email Client 1	2021-12-01	1196
o305p208q337	OS 3	Email Client 2	2021-03-01	1118
o391p779q935	OS 1	Email Client 2	2021-06-01	1092
o678p794q957	OS 1	Email Client 1	2021-09-01	1066
o783p832q294	OS 2	Email Client 2	2021-09-01	1040
p164q780r999	OS 3	Email Client 2	2021-12-01	1119
p288q432r721	OS 3	Email Client 2	2021-12-01	1067
p611q262r945	OS 1	Email Client 2	2021-03-01	1015
p752q137r169	OS 3	Email Client 2	2021-12-01	1145
p765q957r699	OS 2	Email Client 1	2021-06-01	1093
p791q114r509	OS 2	Email Client 1	2021-09-01	1197
p834q238r776	OS 3	Email Client 2	2021-03-01	1171

p929q222r778	OS 3	Email Client 1	2021-06-01	1041
q175r338s833	OS 3	Email Client 1	2021-06-01	1042
q228r135s755	OS 1	Email Client 2	2021-09-01	1146
q308r573s459	OS 3	Email Client 1	2021-03-01	1198
q372r826s628	OS 2	Email Client 1	2021-09-01	1172
q689r187s648	OS 2	Email Client 1	2021-12-01	1068
q793r736s288	OS 2	Email Client 1	2021-03-01	1016
q912r119s313	OS 2	Email Client 1	2021-06-01	1120
r194s893t593	OS 1	Email Client 2	2021-06-01	1095
r454s225t299	OS 2	Email Client 2	2021-12-01	1147
r520s571t459	OS 2	Email Client 2	2021-03-01	1199
r537s849t690	OS 1	Email Client 2	2021-09-01	1173
r550s824t230	OS 2	Email Client 1	2021-03-01	1017
r628s557t397	OS 1	Email Client 1	2021-12-01	1121
s103t952u851	OS 2	Email Client 2	2021-03-01	1122
s310t540u653	OS 1	Email Client 2	2021-12-01	1018
s328t505u907	OS 3	Email Client 2	2021-12-01	1148
s371t911u987	OS 1	Email Client 2	2021-06-01	1174
s375t538u194	OS 2	Email Client 1	2021-12-01	1096
s429t157u159	OS 1	Email Client 1	2021-03-01	1044
s772t175u409	OS 1	Email Client 1	2021-06-01	1070
s918t412u294	OS 3	Email Client 2	2021-12-01	0
t244u829v723	OS 1	Email Client 2	2021-06-01	1071
t363u179v368	OS 3	Email Client 2	2021-03-01	1097
t479u468v151	OS 1	Email Client 1	2021-06-01	1123
t567u844v434	OS 3	Email Client 2	2021-12-01	1045

t709u492v884	OS 1	Email Client 2	2021-06-01	1149
t801u630v138	OS 2	Email Client 2	2021-03-01	0
t815u205v470	OS 3	Email Client 1	2021-06-01	1019
t959u687v394	OS 2	Email Client 2	2021-06-01	1175
u113v483w811	OS 3	Email Client 2	2021-06-01	0
u340v931w764	OS 2	Email Client 2	2021-09-01	1124
u429v921w138	OS 2	Email Client 2	2021-12-01	1046
u554v512w139	OS 1	Email Client 1	2021-03-01	1150
u671v146w618	OS 1	Email Client 2	2021-09-01	1098
u849v569w521	OS 2	Email Client 1	2021-06-01	1176
u899v381w363	OS 3	Email Client 1	2021-06-01	1020
u905v920w694	OS 1	Email Client 1	2021-09-01	1072
v109w587x644	OS 2	Email Client 2	2021-03-01	1047
v135w241x773	OS 2	Email Client 2	2021-12-01	1073
v200w121x977	OS 2	Email Client 2	2021-03-01	1021
v283w690x104	OS 1	Email Client 1	2021-03-01	1099
v491w553x421	OS 2	Email Client 2	2021-03-01	1125
v691w183x928	OS 1	Email Client 2	2021-09-01	1177
v846w200x439	OS 1	Email Client 1	2021-06-01	0
v852w513x954	OS 2	Email Client 1	2021-12-01	1151
w167x592y375	OS 3	Email Client 1	2021-12-01	1048
w190x708y760	OS 3	Email Client 2	2021-03-01	1126
w237x430y567	OS 2	Email Client 2	2021-06-01	1022
w326x611y598	OS 1	Email Client 2	2021-03-01	1100
w622x645y348	OS 3	Email Client 1	2021-03-01	1074
w981x771y326	OS 2	Email Client 2	2021-06-01	0

w986x187y885	OS 3	Email Client 2	2021-12-01	1178
x127y181z890	OS 2	Email Client 1	2021-06-01	1127
x174y934z376	OS 1	Email Client 2	2021-06-01	1179
x253y759z103	OS 1	Email Client 2	2021-12-01	1023
x561y839z458	OS 2	Email Client 1	2021-09-01	0
x573y883z772	OS 1	Email Client 1	2021-12-01	1075
x677y330z296	OS 1	Email Client 2	2021-06-01	1153
x701y250z303	OS 3	Email Client 2	2021-03-01	1101
y103z561a649	OS 2	Email Client 1	2021-03-01	1128
y131z211a578	OS 2	Email Client 1	2021-03-01	1180
y132z930a114	OS 2	Email Client 2	2021-06-01	1050
y246z508a775	OS 2	Email Client 1	2021-12-01	0
y347z204a710	OS 2	Email Client 2	2021-12-01	1076
y765z123a548	OS 2	Email Client 2	2021-06-01	1154
y943z930a241	OS 1	Email Client 2	2021-09-01	1102
y976z753a267	OS 2	Email Client 2	2021-06-01	1024
z381a365b233	OS 3	Email Client 2	2021-12-01	1025
z451a308b518	OS 2	Email Client 1	2021-03-01	1051
z566a147b347	OS 1	Email Client 1	2021-12-01	1129
z654a154b259	OS 2	Email Client 2	2021-12-01	1077
z803a233b718	OS 1	Email Client 2	2021-12-01	1181
z821a946b264	OS 3	Email Client 2	2021-06-01	0
z942a966b589	OS 3	Email Client 1	2021-09-01	1155
+--------------+-----------------+---------------+--------------+-------------+

200 rows in set (0.050 sec)

```
MariaDB [organization]> SELECT *
    -> FROM machines
    -> INNER JOIN employees ON machines.device_id = employees.device_id;
```

device_id	operating_system	email_client	OS_patch_date	employee_id	employee_id	device_id	username	department	office
a320b137c219	OS 2	Email Client 2	2021-03-01	1000	1000	a320b137c219	elarson	Marketing	East-170
b239c825d303	OS 1	Email Client 1	2021-03-01	1001	1001	b239c825d303	bmoreno	Marketing	Central-276
c116d593e558	OS 3	Email Client 1	2021-09-01	1002	1002	c116d593e558	tshah	Human Resources	North-434
d394e816f943	OS 3	Email Client 2	2021-03-01	1003	1003	d394e816f943	sgilmore	Finance	South-153
e218f877g788	OS 2	Email Client 1	2021-09-01	1004	1004	e218f877g788	eraab	Human Resources	South-127
f551g340h864	OS 3	Email Client 2	2021-12-01	1005	1005	f551g340h864	gesparza	Human Resources	South-366
g329h357i597	OS 1	Email Client 2	2021-06-01	1006	1006	g329h357i597	alevitsk	Information Technology	East-320
h174i497j413	OS 2	Email Client 1	2021-03-01	1007	1007	h174i497j413	wjaffrey	Finance	North-406
i858j583k571	OS 2	Email Client 2	2021-06-01	1008	1008	i858j583k571	abernard	Finance	South-170
k242l212m542	OS 1	Email Client 1	2021-03-01	1010	1010	k242l212m542	jlansky	Finance	South-109

| l748m120n401 | OS 3 | Email Client 1 | 2021-09-01 | 1011 | 1011 | l748m120n401 | drosas | Sales | South-292 |

| m756n668o146 | OS 1 | Email Client 2 | 2021-09-01 | 1012 | 1012 | m756n668o146 | nmason | Information Technology | North-160 |

| n205o559p243 | OS 1 | Email Client 2 | 2021-06-01 | 1013 | 1013 | n205o559p243 | zbernal | Information Technology | South-229 |

| p611q262r945 | OS 1 | Email Client 2 | 2021-03-01 | 1015 | 1015 | p611q262r945 | jsoto | Finance | North-271 |

| q793r736s288 | OS 2 | Email Client 1 | 2021-03-01 | 1016 | 1016 | q793r736s288 | sbaelish | Human Resources | North-229 |

| r550s824t230 | OS 2 | Email Client 1 | 2021-03-01 | 1017 | 1017 | r550s824t230 | jclark | Finance | North-188 |

| s310t540u653 | OS 1 | Email Client 2 | 2021-12-01 | 1018 | 1018 | s310t540u653 | abellmas | Finance | North-403 |

| t815u205v470 | OS 3 | Email Client 1 | 2021-06-01 | 1019 | 1019 | t815u205v470 | mcouliba | Information Technology | North-108 |

| u899v381w363 | OS 3 | Email Client 1 | 2021-06-01 | 1020 | 1020 | u899v381w363 | arutley | Marketing | South-351 |

| v200w121x977 | OS 2 | Email Client 2 | 2021-03-01 | 1021 | 1021 | v200w121x977 | smartell | Information Technology | South-138 |

| w237x430y567 | OS 2 | Email Client 2 | 2021-06-01 | 1022 | 1022 | w237x430y567 | arusso | Finance | West-465 |

| x253y759z103 | OS 1 | Email Client 2 | 2021-12-01 | 1023 | 1023 | x253y759z103 | aalonso | Information Technology | West-393 |

| y976z753a267 | OS 2 | Email Client 2 | 2021-06-01 | 1024 | 1024 | y976z753a267 | iuduike | Sales | South-215 |

| z381a365b233 | OS 3 | Email Client 2 | 2021-12-01 | 1025 | 1025 | z381a365b233 | jhill | Sales | North-115 |

| a998b568c863 | OS 3 | Email Client 1 | 2021-12-01 | 1026 | 1026 | a998b568c863 | apatel | Human Resources | West-320 |

```
| b806c503d354 | OS 2        | Email Client 1 | 2021-12-01  |      1027 |      1027 |
b806c503d354 | mrah    | Marketing          | West-246   |

| c603d749e374 | OS 1        | Email Client 1 | 2021-12-01  |      1028 |      1028 |
c603d749e374 | aestrada | Human Resources     | West-121   |

| d336e475f676 | OS 2        | Email Client 2 | 2021-06-01  |      1029 |      1029 |
d336e475f676 | ivelasco | Finance            | East-156   |

| e391f189g913 | OS 3        | Email Client 2 | 2021-12-01  |      1030 |      1030 |
e391f189g913 | mabadi   | Marketing          | West-375   |

| f419g188h578 | OS 1        | Email Client 1 | 2021-06-01  |      1031 |      1031 |
f419g188h578 | dkot    | Marketing          | West-408   |

| g773h303i639 | OS 2        | Email Client 2 | 2021-12-01  |      1032 |      1032 |
g773h303i639 | jrafael  | Information Technology | Central-309 |

| i679j565k940 | OS 1        | Email Client 1 | 2021-03-01  |      1034 |      1034 |
i679j565k940 | bsand   | Human Resources     | East-484   |

| j236k303l245 | OS 1        | Email Client 1 | 2021-12-01  |      1035 |      1035 |
j236k303l245 | bisles  | Sales              | South-171  |

| k550l533m205 | OS 3        | Email Client 2 | 2021-09-01  |      1036 |      1036 |
k550l533m205 | rjensen  | Marketing          | Central-239 |

| l693m585n528 | OS 3        | Email Client 1 | 2021-06-01  |      1037 |      1037 |
l693m585n528 | dtanaka  | Information Technology | West-468   |

| m873n636o225 | OS 1        | Email Client 2 | 2021-06-01  |      1038 |      1038 |
m873n636o225 | btang   | Human Resources       | Central-260 |

| n253o917p623 | OS 1        | Email Client 2 | 2021-09-01  |      1039 |      1039 |
n253o917p623 | cjackson | Sales              | East-378   |

| o783p832q294 | OS 2        | Email Client 2 | 2021-09-01  |      1040 |      1040 |
o783p832q294 | dtarly   | Human Resources        | East-237   |

| p929q222r778 | OS 3        | Email Client 1 | 2021-06-01  |      1041 |      1041 |
p929q222r778 | cgriffin | Sales              | North-208  |

| q175r338s833 | OS 3        | Email Client 1 | 2021-06-01  |      1042 |      1042 |
q175r338s833 | acook   | Human Resources        | West-381   |
```

s429t157u159	OS 1	Email Client 1	2021-03-01	1044	1044	s429t157u159	tbarnes	Finance	West-415
t567u844v434	OS 3	Email Client 2	2021-12-01	1045	1045	t567u844v434	pwashing	Finance	East-115
u429v921w138	OS 2	Email Client 2	2021-12-01	1046	1046	u429v921w138	daquino	Finance	West-280
v109w587x644	OS 2	Email Client 2	2021-03-01	1047	1047	v109w587x644	cward	Finance	West-373
w167x592y375	OS 3	Email Client 1	2021-12-01	1048	1048	w167x592y375	tmitchel	Finance	South-288
y132z930a114	OS 2	Email Client 2	2021-06-01	1050	1050	y132z930a114	csimmons	Finance	North-468
z451a308b518	OS 2	Email Client 1	2021-03-01	1051	1051	z451a308b518	itraora	Marketing	Central-134
a192b174c940	OS 2	Email Client 1	2021-06-01	1052	1052	a192b174c940	jdarosa	Marketing	East-195
b979c871d361	OS 2	Email Client 1	2021-03-01	1053	1053	b979c871d361	nemmanue	Human Resources	Central-259
c547d140e477	OS 2	Email Client 1	2021-03-01	1054	1054	c547d140e477	tcook	Information Technology	West-248
d831e972f553	OS 1	Email Client 1	2021-09-01	1055	1055	d831e972f553	awilliam	Marketing	Central-256
e782f537g683	OS 1	Email Client 1	2021-03-01	1056	1056	e782f537g683	ankala	Marketing	North-139
f370g535h632	OS 2	Email Client 2	2021-09-01	1057	1057	f370g535h632	mscott	Sales	South-270
g264h852i697	OS 3	Email Client 1	2021-03-01	1058	1058	g264h852i697	madebowa	Marketing	South-119
h832i322j795	OS 1	Email Client 1	2021-09-01	1059	1059	h832i322j795	jnguyen	Marketing	South-255

```
| i446j874k974 | OS 3         | Email Client 1 | 2021-03-01   |     1060 |     1060 |
i446j874k974 | tbecker  | Information Technology | North-164   |

| j255k281l925 | OS 3         | Email Client 1 | 2021-06-01   |     1061 |     1061 |
j255k281l925 | nhersh   | Human Resources      | East-163   |

| k367l639m697 | OS 1         | Email Client 1 | 2021-12-01   |     1062 |     1062 |
k367l639m697 | redwards | Finance             | North-180   |

| l686m140n569 | OS 3         | Email Client 2 | 2021-12-01   |     1063 |     1063 |
l686m140n569 | lpope    | Sales               | East-226   |

| n428o322p522 | OS 1         | Email Client 1 | 2021-12-01   |     1065 |     1065 |
n428o322p522 | imoore   | Human Resources      | West-490   |

| o678p794q957 | OS 1         | Email Client 1 | 2021-09-01   |     1066 |     1066 |
o678p794q957 | ttyrell  | Sales               | Central-444 |

| p288q432r721 | OS 3         | Email Client 2 | 2021-12-01   |     1067 |     1067 |
p288q432r721 | lwhite   | Marketing           | North-277   |

| q689r187s648 | OS 2         | Email Client 1 | 2021-12-01   |     1068 |     1068 |
q689r187s648 | djames   | Information Technology | West-438   |

| s772t175u409 | OS 1         | Email Client 1 | 2021-06-01   |     1070 |     1070 |
s772t175u409 | tbailey  | Human Resources      | North-204   |

| t244u829v723 | OS 1         | Email Client 2 | 2021-06-01   |     1071 |     1071 |
t244u829v723 | zdutchma | Sales               | West-348   |

| u905v920w694 | OS 1         | Email Client 1 | 2021-09-01   |     1072 |     1072 |
u905v920w694 | esmith   | Sales               | East-421   |

| v135w241x773 | OS 2         | Email Client 2 | 2021-12-01   |     1073 |     1073 |
v135w241x773 | srobinso | Marketing           | Central-494 |

| w622x645y348 | OS 3         | Email Client 1 | 2021-03-01   |     1074 |     1074 |
w622x645y348 | dcoleman | Information Technology | East-126   |

| x573y883z772 | OS 1         | Email Client 1 | 2021-12-01   |     1075 |     1075 |
x573y883z772 | fbautist | Marketing           | East-267   |

| y347z204a710 | OS 2         | Email Client 2 | 2021-12-01   |     1076 |     1076 |
y347z204a710 | fgarcia  | Finance             | Central-270 |
```

z654a154b259	OS 2	Email Client 2	2021-12-01	1077	1077	z654a154b259	ldavis	Human Resources	East-241
a667b270c984	OS 1	Email Client 1	2021-03-01	1078	1078	a667b270c984	sharley	Sales	North-418
b433c245d868	OS 1	Email Client 1	2021-06-01	1079	1079	b433c245d868	gmedina	Marketing	North-456
c568d742e974	OS 2	Email Client 2	2021-09-01	1080	1080	c568d742e974	gmoon	Marketing	North-156
d647e310f618	OS 2	Email Client 2	2021-06-01	1081	1081	d647e310f618	qcorbit	Finance	South-290
e301f659g551	OS 3	Email Client 2	2021-12-01	1082	1082	e301f659g551	mjohnson	Information Technology	East-151
f840g812h544	OS 1	Email Client 2	2021-12-01	1083	1083	f840g812h544	gkoshi	Finance	West-165
g950h972i991	OS 2	Email Client 1	2021-12-01	1084	1084	g950h972i991	nhuynh	Human Resources	South-155
h339i498j269	OS 1	Email Client 1	2021-03-01	1085	1085	h339i498j269	cperez	Sales	East-325
i281j129k749	OS 3	Email Client 1	2021-06-01	1086	1086	i281j129k749	lmajumda	Sales	West-499
j803k645l251	OS 2	Email Client 1	2021-12-01	1087	1087	j803k645l251	ibisset	Information Technology	North-230
k865l965m233	OS 3	Email Client 2	2021-12-01	1088	1088	k865l965m233	rgosh	Marketing	East-157
l358m929n154	OS 3	Email Client 2	2021-03-01	1089	1089	l358m929n154	jpark2	Sales	West-251
m891n748o375	OS 2	Email Client 2	2021-12-01	1090	1090	m891n748o375	cpatel	Information Technology	South-351
n378o313p469	OS 3	Email Client 2	2021-12-01	1091	1091	n378o313p469	rtran	Sales	Central-230

| o391p779q935 | OS 1 | Email Client 2 | 2021-06-01 | 1092 | 1092 | o391p779q935 | lpark | Sales | West-227 |

| p765q957r699 | OS 2 | Email Client 1 | 2021-06-01 | 1093 | 1093 | p765q957r699 | etargary | Human Resources | Central-247 |

| r194s893t593 | OS 1 | Email Client 2 | 2021-06-01 | 1095 | 1095 | r194s893t593 | glopez | Information Technology | East-457 |

| s375t538u194 | OS 2 | Email Client 1 | 2021-12-01 | 1096 | 1096 | s375t538u194 | kjeffers | Information Technology | East-419 |

| t363u179v368 | OS 3 | Email Client 2 | 2021-03-01 | 1097 | 1097 | t363u179v368 | jlee | Human Resources | South-254 |

| u671v146w618 | OS 1 | Email Client 2 | 2021-09-01 | 1098 | 1098 | u671v146w618 | tarchamb | Sales | North-423 |

| v283w690x104 | OS 1 | Email Client 1 | 2021-03-01 | 1099 | 1099 | v283w690x104 | anaser | Finance | West-357 |

| w326x611y598 | OS 1 | Email Client 2 | 2021-03-01 | 1100 | 1100 | w326x611y598 | mjin | Human Resources | Central-371 |

| x701y250z303 | OS 3 | Email Client 2 | 2021-03-01 | 1101 | 1101 | x701y250z303 | ichowdhu | Human Resources | East-233 |

| y943z930a241 | OS 1 | Email Client 2 | 2021-09-01 | 1102 | 1102 | y943z930a241 | kselassi | Marketing | South-378 |

| a821b452c176 | OS 2 | Email Client 2 | 2021-12-01 | 1104 | 1104 | a821b452c176 | mreed | Information Technology | West-288 |

| b551c837d758 | OS 3 | Email Client 1 | 2021-03-01 | 1105 | 1105 | b551c837d758 | kmei | Finance | Central-232 |

| c597d792e215 | OS 2 | Email Client 1 | 2021-09-01 | 1106 | 1106 | c597d792e215 | jcohen | Marketing | South-395 |

| d168e758f876 | OS 2 | Email Client 1 | 2021-09-01 | 1107 | 1107 | d168e758f876 | akajwara | Sales | North-471 |

| e113f288g203 | OS 2 | Email Client 2 | 2021-03-01 | 1108 | 1108 | e113f288g203 | jwashing | Human Resources | North-226 |

| f229g533h679 | OS 2 | Email Client 2 | 2021-03-01 | 1109 | 1109 | f229g533h679 | nlocklea | Sales | East-196 |

| g567h376i314 | OS 3 | Email Client 1 | 2021-12-01 | 1110 | 1110 | g567h376i314 | pchaudhu | Sales | Central-428 |

| h835i179j862 | OS 2 | Email Client 2 | 2021-06-01 | 1111 | 1111 | h835i179j862 | jlee | Sales | West-309 |

| i772j807k175 | OS 2 | Email Client 1 | 2021-12-01 | 1112 | 1112 | i772j807k175 | ccruz | Information Technology | South-298 |

| j781k420l510 | OS 1 | Email Client 1 | 2021-09-01 | 1113 | 1113 | j781k420l510 | pjaimes | Human Resources | East-366 |

| l552m734n118 | OS 2 | Email Client 2 | 2021-03-01 | 1115 | 1115 | l552m734n118 | esmith2 | Information Technology | Central-204 |

| m272n572o874 | OS 3 | Email Client 2 | 2021-09-01 | 1116 | 1116 | m272n572o874 | nzhao | Sales | South-100 |

| n683o758p820 | OS 2 | Email Client 1 | 2021-12-01 | 1117 | 1117 | n683o758p820 | dahmad | Sales | West-405 |

| o305p208q337 | OS 3 | Email Client 2 | 2021-03-01 | 1118 | 1118 | o305p208q337 | jpark3 | Sales | South-329 |

| p164q780r999 | OS 3 | Email Client 2 | 2021-12-01 | 1119 | 1119 | p164q780r999 | omubarak | Sales | West-409 |

| q912r119s313 | OS 2 | Email Client 1 | 2021-06-01 | 1120 | 1120 | q912r119s313 | rbradsha | Marketing | Central-200 |

| r628s557t397 | OS 1 | Email Client 1 | 2021-12-01 | 1121 | 1121 | r628s557t397 | mrojas | Sales | East-288 |

| s103t952u851 | OS 2 | Email Client 2 | 2021-03-01 | 1122 | 1122 | s103t952u851 | btorres | Finance | West-319 |

| t479u468v151 | OS 1 | Email Client 1 | 2021-06-01 | 1123 | 1123 | t479u468v151 | ekonya | Human Resources | South-445 |

| u340v931w764 | OS 2 | Email Client 2 | 2021-09-01 | 1124 | 1124 | u340v931w764 | claw | Human Resources | Central-172 |

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| v491w553x421 | OS 2           | Email Client 2 | 2021-03-01   |      1125 |      1125 |
v491w553x421 | mrodgers | Marketing          | South-490   |

| w190x708y760 | OS 3           | Email Client 2 | 2021-03-01   |      1126 |      1126 |
w190x708y760 | lmiller  | Information Technology | West-296    |

| x127y181z890 | OS 2           | Email Client 1 | 2021-06-01   |      1127 |      1127 |
x127y181z890 | jterranc | Information Technology | Central-256 |

| y103z561a649 | OS 2           | Email Client 1 | 2021-03-01   |      1128 |      1128 |
y103z561a649 | mpirato  | Human Resources        | West-205    |

| z566a147b347 | OS 1           | Email Client 1 | 2021-12-01   |      1129 |      1129 |
z566a147b347 | plopez   | Marketing          | West-326    |

| a317b635c465 | OS 1           | Email Client 2 | 2021-03-01   |      1130 |      1130 |
a317b635c465 | tsnow    | Sales              | Central-451 |

| b265c937d713 | OS 2           | Email Client 1 | 2021-09-01   |      1131 |      1131 |
b265c937d713 | asierra  | Information Technology | South-159   |

| c150d982e144 | OS 2           | Email Client 2 | 2021-06-01   |      1132 |      1132 |
c150d982e144 | creddy   | Human Resources        | Central-210 |

| d693e351f221 | OS 2           | Email Client 2 | 2021-09-01   |      1133 |      1133 |
d693e351f221 | pfrey    | Marketing          | Central-164 |

| e395f616g566 | OS 2           | Email Client 2 | 2021-03-01   |      1134 |      1134 |
e395f616g566 | akhatri  | Human Resources        | West-159    |

| f934g229h883 | OS 2           | Email Client 2 | 2021-03-01   |      1135 |      1135 |
f934g229h883 | khamamot | Information Technology | East-186    |

| g299h520i457 | OS 2           | Email Client 1 | 2021-09-01   |      1136 |      1136 |
g299h520i457 | jhawes   | Finance            | West-416    |

| h165i539j638 | OS 3           | Email Client 1 | 2021-03-01   |      1137 |      1137 |
h165i539j638 | mwood    | Human Resources        | South-166   |

| i671j355k725 | OS 2           | Email Client 2 | 2021-03-01   |      1138 |      1138 |
i671j355k725 | sromero  | Finance            | South-329   |

| j637k986l199 | OS 2           | Email Client 1 | 2021-06-01   |      1139 |      1139 |
j637k986l199 | emorton  | Human Resources        | North-300   |
```

```
| k982l199m839 | OS 2          | Email Client 2 | 2021-03-01   |      1140 |      1140 |
k982l199m839 | apatel2  | Human Resources      | East-385   |

| l282m821n717 | OS 1          | Email Client 1 | 2021-12-01   |      1141 |      1141 |
l282m821n717 | cochuba  | Human Resources       | South-282   |

| m674n127o823 | OS 3          | Email Client 2 | 2021-03-01   |      1142 |      1142 |
m674n127o823 | lsilva   | Finance            | East-440   |

| n704o364p471 | OS 2          | Email Client 2 | 2021-09-01   |      1143 |      1143 |
n704o364p471 | sstark   | Information Technology | East-282   |

| p752q137r169 | OS 3          | Email Client 2 | 2021-12-01   |      1145 |      1145 |
p752q137r169 | msosa    | Human Resources       | South-345   |

| q228r135s755 | OS 1          | Email Client 2 | 2021-09-01   |      1146 |      1146 |
q228r135s755 | ulemere  | Human Resources       | Central-171 |

| r454s225t299 | OS 2          | Email Client 2 | 2021-12-01   |      1147 |      1147 |
r454s225t299 | tvega    | Finance            | West-177   |

| s328t505u907 | OS 3          | Email Client 2 | 2021-12-01   |      1148 |      1148 |
s328t505u907 | dharvey  | Finance            | South-181   |

| t709u492v884 | OS 1          | Email Client 2 | 2021-06-01   |      1149 |      1149 |
t709u492v884 | klim     | Information Technology | South-411   |

| u554v512w139 | OS 1          | Email Client 1 | 2021-03-01   |      1150 |      1150 |
u554v512w139 | lmarin   | Marketing           | Central-364 |

| v852w513x954 | OS 2          | Email Client 1 | 2021-12-01   |      1151 |      1151 |
v852w513x954 | sshah    | Human Resources       | North-272   |

| x677y330z296 | OS 1          | Email Client 2 | 2021-06-01   |      1153 |      1153 |
x677y330z296 | ncardena | Marketing           | Central-363 |

| y765z123a548 | OS 2          | Email Client 2 | 2021-06-01   |      1154 |      1154 |
y765z123a548 | obryand  | Marketing           | North-182   |

| z942a966b589 | OS 3          | Email Client 1 | 2021-09-01   |      1155 |      1155 |
z942a966b589 | zjones   | Human Resources       | East-122   |

| a184b775c707 | OS 1          | Email Client 1 | 2021-09-01   |      1156 |      1156 |
a184b775c707 | dellery  | Marketing           | East-417   |
```

| b264c773d977 | OS 2 | Email Client 2 | 2021-03-01 | 1157 | 1157 | b264c773d977 | lstein | Human Resources | Central-343 |

| c406d877e950 | OS 2 | Email Client 1 | 2021-06-01 | 1158 | 1158 | c406d877e950 | bnaser | Human Resources | Central-243 |

| d881e710f732 | OS 3 | Email Client 2 | 2021-03-01 | 1159 | 1159 | d881e710f732 | jshen | Finance | East-193 |

| e127f591g924 | OS 3 | Email Client 2 | 2021-12-01 | 1160 | 1160 | e127f591g924 | spham | Marketing | West-353 |

| f951g408h866 | OS 1 | Email Client 2 | 2021-03-01 | 1161 | 1161 | f951g408h866 | jjenkins | Information Technology | East-433 |

| g953h643i618 | OS 2 | Email Client 2 | 2021-06-01 | 1162 | 1162 | g953h643i618 | iortega | Information Technology | West-381 |

| h679i515j339 | OS 3 | Email Client 1 | 2021-09-01 | 1163 | 1163 | h679i515j339 | cwilliam | Marketing | East-216 |

| i682j513k442 | OS 3 | Email Client 1 | 2021-03-01 | 1164 | 1164 | i682j513k442 | fsmeltz | Finance | North-163 |

| j713k893l832 | OS 2 | Email Client 1 | 2021-03-01 | 1165 | 1165 | j713k893l832 | nwords | Marketing | South-128 |

| k495l234m708 | OS 1 | Email Client 2 | 2021-09-01 | 1166 | 1166 | k495l234m708 | nyoung | Marketing | Central-397 |

| l738m922n515 | OS 1 | Email Client 1 | 2021-03-01 | 1167 | 1167 | l738m922n515 | tblackwe | Marketing | North-443 |

| m778n920o426 | OS 2 | Email Client 2 | 2021-06-01 | 1168 | 1168 | m778n920o426 | jharris | Information Technology | South-305 |

| o156p302q359 | OS 2 | Email Client 1 | 2021-03-01 | 1170 | 1170 | o156p302q359 | lalvarez | Human Resources | North-278 |

| p834q238r776 | OS 3 | Email Client 2 | 2021-03-01 | 1171 | 1171 | p834q238r776 | plopez2 | Information Technology | Central-496 |

| q372r826s628 | OS 2 | Email Client 1 | 2021-09-01 | 1172 | 1172 | q372r826s628 | akhan | Marketing | Central-360 |

```
| r537s849t690 | OS 1          | Email Client 2 | 2021-09-01   |      1173 |      1173 |
r537s849t690 | ialcazar | Marketing          | South-429   |

| s371t911u987 | OS 1          | Email Client 2 | 2021-06-01   |      1174 |      1174 |
s371t911u987 | eortiz   | Finance            | North-428   |

| t959u687v394 | OS 2          | Email Client 2 | 2021-06-01   |      1175 |      1175 |
t959u687v394 | jclark2 | Finance            | North-194   |

| u849v569w521 | OS 2          | Email Client 1 | 2021-06-01   |      1176 |      1176 |
u849v569w521 | nliu     | Sales              | West-220    |

| v691w183x928 | OS 1          | Email Client 2 | 2021-09-01   |      1177 |      1177 |
v691w183x928 | aezra    | Human Resources       | East-190    |

| w986x187y885 | OS 3          | Email Client 2 | 2021-12-01   |      1178 |      1178 |
w986x187y885 | nlannist | Marketing          | North-196   |

| x174y934z376 | OS 1          | Email Client 2 | 2021-06-01   |      1179 |      1179 |
x174y934z376 | asalas   | Human Resources       | North-445   |

| y131z211a578 | OS 2          | Email Client 1 | 2021-03-01   |      1180 |      1180 |
y131z211a578 | medwards | Human Resources       | Central-340 |

| z803a233b718 | OS 1          | Email Client 2 | 2021-12-01   |      1181 |      1181 |
z803a233b718 | sessa    | Finance            | South-207   |

| a305b818c708 | OS 3          | Email Client 2 | 2021-06-01   |      1182 |      1182 |
a305b818c708 | mmora    | Information Technology | Central-250 |

| b566c710d544 | OS 1          | Email Client 1 | 2021-06-01   |      1183 |      1183 |
b566c710d544 | lquraish | Human Resources       | East-400    |

| c986d200e170 | OS 2          | Email Client 2 | 2021-09-01   |      1184 |      1184 |
c986d200e170 | ptsosie  | Human Resources       | Central-247 |

| d790e839f461 | OS 1          | Email Client 1 | 2021-06-01   |      1185 |      1185 |
d790e839f461 | revens   | Sales              | North-330   |

| e281f433g404 | OS 1          | Email Client 2 | 2021-12-01   |      1186 |      1186 |
e281f433g404 | sacosta  | Sales              | North-460   |

| f963g637h851 | OS 1          | Email Client 1 | 2021-06-01   |      1187 |      1187 |
f963g637h851 | bbode    | Finance            | East-351    |
```

| g164h566i795 | OS 1 | Email Client 1 | 2021-09-01 | 1188 | 1188 | g164h566i795 | noshiro | Finance | West-252 |

| h784i120j837 | OS 3 | Email Client 2 | 2021-12-01 | 1189 | 1189 | h784i120j837 | slefkowi | Human Resources | West-342 |

| k570l183m949 | OS 3 | Email Client 1 | 2021-12-01 | 1192 | 1192 | k570l183m949 | rlaghari | Information Technology | East-138 |

| l186m618n319 | OS 1 | Email Client 2 | 2021-12-01 | 1193 | 1193 | l186m618n319 | esantiag | Information Technology | Central-300 |

| m340n287o441 | OS 2 | Email Client 2 | 2021-09-01 | 1194 | 1194 | m340n287o441 | zwarren | Human Resources | West-212 |

| n516o853p957 | OS 1 | Email Client 1 | 2021-09-01 | 1195 | 1195 | n516o853p957 | orainier | Finance | East-346 |

| o225p357q829 | OS 3 | Email Client 1 | 2021-12-01 | 1196 | 1196 | o225p357q829 | sshah2 | Information Technology | South-385 |

| p791q114r509 | OS 2 | Email Client 1 | 2021-09-01 | 1197 | 1197 | p791q114r509 | aabara | Information Technology | North-159 |

| q308r573s459 | OS 3 | Email Client 1 | 2021-03-01 | 1198 | 1198 | q308r573s459 | jmartine | Marketing | South-117 |

| r520s571t459 | OS 2 | Email Client 2 | 2021-03-01 | 1199 | 1199 | r520s571t459 | areyes | Human Resources | East-100 |

+-------------+-----------------+---------------+--------------+------------+------------+-------------+----------+-----------------------+------------+

185 rows in set (0.070 sec)

MariaDB [organization]>

Task 2. Return more data

You now must return the information on all machines and the employees who have machines. Next, you must do the reverse and retrieve the information of all employees and any machines that are assigned to them.

To achieve this, you'll complete a left join and a right join on the `employees` and `machines` tables. The results will include all records from one or the other table. You must link these tables using the common `device_id` column.

1. Run the following SQL query to connect the `machines` and `employees` tables through a left join. You must replace the keyword X in the query:

```
SELECT *
FROM machines
X JOIN employees ON machines.device_id = employees.device_id;
```
Copied!

Note: In a left join, all records from the table referenced after `FROM` and before `LEFT JOIN` are included in the result. In this case, all records from the `machines` table are included, regardless of whether they are assigned to an employee or not.

What is the value in the username column for the last record returned?

cgriffin

check NULL

asundara

close areyes

2. Run the following SQL query to connect the `machines` and `employees` tables through a right join. You must replace the keyword X in the query to solve the problem:

```
SELECT *
FROM machines
X JOIN employees ON machines.device_id = employees.device_id;
```
Copied!

Note: In a right join, all records from the table referenced after `RIGHT JOIN` are included in the result. In this case, all records from the `employees` table are included, regardless of whether they have a machine or not.

What is the value in the username column for the last record returned?

cgriffin

asundara

NULL

check areyes

Click **Check my progress** to verify that you have completed this task correctly.

Return more data

You have completed this task and performed a left join and right join on the employees and machines tables.

ariaDB [organization]>

MariaDB [organization]>

MariaDB [organization]> SELECT *

   -> FROM machines

   -> left JOIN employees ON machines.device_id = employees.device_id;

```
+--------------+------------------+---------------+---------------+-------------+-------------+-------------+----------+-----------------------+-------------+
| device_id    | operating_system | email_client  | OS_patch_date | employee_id | employee_id | device_id   | username | department            | office      |
+--------------+------------------+---------------+---------------+-------------+-------------+-------------+----------+-----------------------+-------------+
| a320b137c219 | OS 2             | Email Client 2 | 2021-03-01   |       1000 |      1000 | a320b137c219 | elarson  | Marketing             | East-170    |
| b239c825d303 | OS 1             | Email Client 1 | 2021-03-01   |       1001 |      1001 | b239c825d303 | bmoreno  | Marketing             | Central-276 |
| c116d593e558 | OS 3             | Email Client 1 | 2021-09-01   |       1002 |      1002 | c116d593e558 | tshah    | Human Resources       | North-434   |
| d394e816f943 | OS 3             | Email Client 2 | 2021-03-01   |       1003 |      1003 | d394e816f943 | sgilmore | Finance               | South-153   |
| e218f877g788 | OS 2             | Email Client 1 | 2021-09-01   |       1004 |      1004 | e218f877g788 | eraab    | Human Resources       | South-127   |
| f551g340h864 | OS 3             | Email Client 2 | 2021-12-01   |       1005 |      1005 | f551g340h864 | gesparza | Human Resources       | South-366   |
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| g329h357i597 | OS 1 | Email Client 2 | 2021-06-01 | 1006 | 1006 | g329h357i597 | alevitsk | Information Technology | East-320 |

| h174i497j413 | OS 2 | Email Client 1 | 2021-03-01 | 1007 | 1007 | h174i497j413 | wjaffrey | Finance | North-406 |

| i858j583k571 | OS 2 | Email Client 2 | 2021-06-01 | 1008 | 1008 | i858j583k571 | abernard | Finance | South-170 |

| k242l212m542 | OS 1 | Email Client 1 | 2021-03-01 | 1010 | 1010 | k242l212m542 | jlansky | Finance | South-109 |

| l748m120n401 | OS 3 | Email Client 1 | 2021-09-01 | 1011 | 1011 | l748m120n401 | drosas | Sales | South-292 |

| m756n668o146 | OS 1 | Email Client 2 | 2021-09-01 | 1012 | 1012 | m756n668o146 | nmason | Information Technology | North-160 |

| n205o559p243 | OS 1 | Email Client 2 | 2021-06-01 | 1013 | 1013 | n205o559p243 | zbernal | Information Technology | South-229 |

| p611q262r945 | OS 1 | Email Client 2 | 2021-03-01 | 1015 | 1015 | p611q262r945 | jsoto | Finance | North-271 |

| q793r736s288 | OS 2 | Email Client 1 | 2021-03-01 | 1016 | 1016 | q793r736s288 | sbaelish | Human Resources | North-229 |

| r550s824t230 | OS 2 | Email Client 1 | 2021-03-01 | 1017 | 1017 | r550s824t230 | jclark | Finance | North-188 |

| s310t540u653 | OS 1 | Email Client 2 | 2021-12-01 | 1018 | 1018 | s310t540u653 | abellmas | Finance | North-403 |

| t815u205v470 | OS 3 | Email Client 1 | 2021-06-01 | 1019 | 1019 | t815u205v470 | mcouliba | Information Technology | North-108 |

| u899v381w363 | OS 3 | Email Client 1 | 2021-06-01 | 1020 | 1020 | u899v381w363 | arutley | Marketing | South-351 |

| v200w121x977 | OS 2 | Email Client 2 | 2021-03-01 | 1021 | 1021 | v200w121x977 | smartell | Information Technology | South-138 |

| w237x430y567 | OS 2 | Email Client 2 | 2021-06-01 | 1022 | 1022 | w237x430y567 | arusso | Finance | West-465 |

| x253y759z103 | OS 1 | Email Client 2 | 2021-12-01 | 1023 | 1023 | x253y759z103 | aalonso | Information Technology | West-393 |

| y976z753a267 | OS 2 | Email Client 2 | 2021-06-01 | 1024 | 1024 | y976z753a267 | iuduike | Sales | South-215 |

| z381a365b233 | OS 3 | Email Client 2 | 2021-12-01 | 1025 | 1025 | z381a365b233 | jhill | Sales | North-115 |

| a998b568c863 | OS 3 | Email Client 1 | 2021-12-01 | 1026 | 1026 | a998b568c863 | apatel | Human Resources | West-320 |

| b806c503d354 | OS 2 | Email Client 1 | 2021-12-01 | 1027 | 1027 | b806c503d354 | mrah | Marketing | West-246 |

| c603d749e374 | OS 1 | Email Client 1 | 2021-12-01 | 1028 | 1028 | c603d749e374 | aestrada | Human Resources | West-121 |

| d336e475f676 | OS 2 | Email Client 2 | 2021-06-01 | 1029 | 1029 | d336e475f676 | ivelasco | Finance | East-156 |

| e391f189g913 | OS 3 | Email Client 2 | 2021-12-01 | 1030 | 1030 | e391f189g913 | mabadi | Marketing | West-375 |

| f419g188h578 | OS 1 | Email Client 1 | 2021-06-01 | 1031 | 1031 | f419g188h578 | dkot | Marketing | West-408 |

| g773h303i639 | OS 2 | Email Client 2 | 2021-12-01 | 1032 | 1032 | g773h303i639 | jrafael | Information Technology | Central-309 |

| i679j565k940 | OS 1 | Email Client 1 | 2021-03-01 | 1034 | 1034 | i679j565k940 | bsand | Human Resources | East-484 |

| j236k303l245 | OS 1 | Email Client 1 | 2021-12-01 | 1035 | 1035 | j236k303l245 | bisles | Sales | South-171 |

| k550l533m205 | OS 3 | Email Client 2 | 2021-09-01 | 1036 | 1036 | k550l533m205 | rjensen | Marketing | Central-239 |

| l693m585n528 | OS 3 | Email Client 1 | 2021-06-01 | 1037 | 1037 | l693m585n528 | dtanaka | Information Technology | West-468 |

| m873n636o225 | OS 1 | Email Client 2 | 2021-06-01 | 1038 | 1038 | m873n636o225 | btang | Human Resources | Central-260 |

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| n253o917p623 | OS 1        | Email Client 2 | 2021-09-01 |      1039 |      1039 |
n253o917p623 | cjackson | Sales             | East-378   |

| o783p832q294 | OS 2        | Email Client 2 | 2021-09-01 |      1040 |      1040 |
o783p832q294 | dtarly  | Human Resources      | East-237   |

| p929q222r778 | OS 3        | Email Client 1 | 2021-06-01 |      1041 |      1041 |
p929q222r778 | cgriffin | Sales            | North-208   |

| q175r338s833 | OS 3        | Email Client 1 | 2021-06-01 |      1042 |      1042 |
q175r338s833 | acook   | Human Resources      | West-381   |

| s429t157u159 | OS 1        | Email Client 1 | 2021-03-01 |      1044 |      1044 |
s429t157u159 | tbarnes  | Finance            | West-415   |

| t567u844v434 | OS 3        | Email Client 2 | 2021-12-01 |      1045 |      1045 |
t567u844v434 | pwashing | Finance            | East-115   |

| u429v921w138 | OS 2        | Email Client 2 | 2021-12-01 |      1046 |      1046 |
u429v921w138 | daquino  | Finance            | West-280   |

| v109w587x644 | OS 2        | Email Client 2 | 2021-03-01 |      1047 |      1047 |
v109w587x644 | cward   | Finance            | West-373   |

| w167x592y375 | OS 3        | Email Client 1 | 2021-12-01 |      1048 |      1048 |
w167x592y375 | tmitchel | Finance            | South-288   |

| y132z930a114 | OS 2        | Email Client 2 | 2021-06-01 |      1050 |      1050 |
y132z930a114 | csimmons | Finance            | North-468   |

| z451a308b518 | OS 2        | Email Client 1 | 2021-03-01 |      1051 |      1051 |
z451a308b518 | itraora  | Marketing          | Central-134 |

| a192b174c940 | OS 2        | Email Client 1 | 2021-06-01 |      1052 |      1052 |
a192b174c940 | jdarosa  | Marketing          | East-195   |

| b979c871d361 | OS 2        | Email Client 1 | 2021-03-01 |      1053 |      1053 |
b979c871d361 | nemmanue | Human Resources      | Central-259 |

| c547d140e477 | OS 2        | Email Client 1 | 2021-03-01 |      1054 |      1054 |
c547d140e477 | tcook   | Information Technology | West-248   |

| d831e972f553 | OS 1        | Email Client 1 | 2021-09-01 |      1055 |      1055 |
d831e972f553 | awilliam | Marketing          | Central-256 |
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e782f537g683	OS 1	Email Client 1	2021-03-01	1056	1056	e782f537g683	ankala	Marketing	North-139
f370g535h632	OS 2	Email Client 2	2021-09-01	1057	1057	f370g535h632	mscott	Sales	South-270
g264h852i697	OS 3	Email Client 1	2021-03-01	1058	1058	g264h852i697	madebowa	Marketing	South-119
h832i322j795	OS 1	Email Client 1	2021-09-01	1059	1059	h832i322j795	jnguyen	Marketing	South-255
i446j874k974	OS 3	Email Client 1	2021-03-01	1060	1060	i446j874k974	tbecker	Information Technology	North-164
j255k281l925	OS 3	Email Client 1	2021-06-01	1061	1061	j255k281l925	nhersh	Human Resources	East-163
k367l639m697	OS 1	Email Client 1	2021-12-01	1062	1062	k367l639m697	redwards	Finance	North-180
l686m140n569	OS 3	Email Client 2	2021-12-01	1063	1063	l686m140n569	lpope	Sales	East-226
n428o322p522	OS 1	Email Client 1	2021-12-01	1065	1065	n428o322p522	imoore	Human Resources	West-490
o678p794q957	OS 1	Email Client 1	2021-09-01	1066	1066	o678p794q957	ttyrell	Sales	Central-444
p288q432r721	OS 3	Email Client 2	2021-12-01	1067	1067	p288q432r721	lwhite	Marketing	North-277
q689r187s648	OS 2	Email Client 1	2021-12-01	1068	1068	q689r187s648	djames	Information Technology	West-438
s772t175u409	OS 1	Email Client 1	2021-06-01	1070	1070	s772t175u409	tbailey	Human Resources	North-204
t244u829v723	OS 1	Email Client 2	2021-06-01	1071	1071	t244u829v723	zdutchma	Sales	West-348
u905v920w694	OS 1	Email Client 1	2021-09-01	1072	1072	u905v920w694	esmith	Sales	East-421

v135w241x773	OS 2	Email Client 2	2021-12-01	1073	1073	v135w241x773	srobinso	Marketing	Central-494
w622x645y348	OS 3	Email Client 1	2021-03-01	1074	1074	w622x645y348	dcoleman	Information Technology	East-126
x573y883z772	OS 1	Email Client 1	2021-12-01	1075	1075	x573y883z772	fbautist	Marketing	East-267
y347z204a710	OS 2	Email Client 2	2021-12-01	1076	1076	y347z204a710	fgarcia	Finance	Central-270
z654a154b259	OS 2	Email Client 2	2021-12-01	1077	1077	z654a154b259	ldavis	Human Resources	East-241
a667b270c984	OS 1	Email Client 1	2021-03-01	1078	1078	a667b270c984	sharley	Sales	North-418
b433c245d868	OS 1	Email Client 1	2021-06-01	1079	1079	b433c245d868	gmedina	Marketing	North-456
c568d742e974	OS 2	Email Client 2	2021-09-01	1080	1080	c568d742e974	gmoon	Marketing	North-156
d647e310f618	OS 2	Email Client 2	2021-06-01	1081	1081	d647e310f618	qcorbit	Finance	South-290
e301f659g551	OS 3	Email Client 2	2021-12-01	1082	1082	e301f659g551	mjohnson	Information Technology	East-151
f840g812h544	OS 1	Email Client 2	2021-12-01	1083	1083	f840g812h544	gkoshi	Finance	West-165
g950h972i991	OS 2	Email Client 1	2021-12-01	1084	1084	g950h972i991	nhuynh	Human Resources	South-155
h339i498j269	OS 1	Email Client 1	2021-03-01	1085	1085	h339i498j269	cperez	Sales	East-325
i281j129k749	OS 3	Email Client 1	2021-06-01	1086	1086	i281j129k749	lmajumda	Sales	West-499
j803k645l251	OS 2	Email Client 1	2021-12-01	1087	1087	j803k645l251	ibisset	Information Technology	North-230

k865l965m233	OS 3	Email Client 2	2021-12-01	1088	1088	k865l965m233	rgosh	Marketing	East-157
l358m929n154	OS 3	Email Client 2	2021-03-01	1089	1089	l358m929n154	jpark2	Sales	West-251
m891n748o375	OS 2	Email Client 2	2021-12-01	1090	1090	m891n748o375	cpatel	Information Technology	South-351
n378o313p469	OS 3	Email Client 2	2021-12-01	1091	1091	n378o313p469	rtran	Sales	Central-230
o391p779q935	OS 1	Email Client 2	2021-06-01	1092	1092	o391p779q935	lpark	Sales	West-227
p765q957r699	OS 2	Email Client 1	2021-06-01	1093	1093	p765q957r699	etargary	Human Resources	Central-247
r194s893t593	OS 1	Email Client 2	2021-06-01	1095	1095	r194s893t593	glopez	Information Technology	East-457
s375t538u194	OS 2	Email Client 1	2021-12-01	1096	1096	s375t538u194	kjeffers	Information Technology	East-419
t363u179v368	OS 3	Email Client 2	2021-03-01	1097	1097	t363u179v368	jlee	Human Resources	South-254
u671v146w618	OS 1	Email Client 2	2021-09-01	1098	1098	u671v146w618	tarchamb	Sales	North-423
v283w690x104	OS 1	Email Client 1	2021-03-01	1099	1099	v283w690x104	anaser	Finance	West-357
w326x611y598	OS 1	Email Client 2	2021-03-01	1100	1100	w326x611y598	mjin	Human Resources	Central-371
x701y250z303	OS 3	Email Client 2	2021-03-01	1101	1101	x701y250z303	ichowdhu	Human Resources	East-233
y943z930a241	OS 1	Email Client 2	2021-09-01	1102	1102	y943z930a241	kselassi	Marketing	South-378
a821b452c176	OS 2	Email Client 2	2021-12-01	1104	1104	a821b452c176	mreed	Information Technology	West-288

| b551c837d758 | OS 3 | Email Client 1 | 2021-03-01 | 1105 | 1105 | b551c837d758 | kmei | Finance | Central-232 |

| c597d792e215 | OS 2 | Email Client 1 | 2021-09-01 | 1106 | 1106 | c597d792e215 | jcohen | Marketing | South-395 |

| d168e758f876 | OS 2 | Email Client 1 | 2021-09-01 | 1107 | 1107 | d168e758f876 | akajwara | Sales | North-471 |

| e113f288g203 | OS 2 | Email Client 2 | 2021-03-01 | 1108 | 1108 | e113f288g203 | jwashing | Human Resources | North-226 |

| f229g533h679 | OS 2 | Email Client 2 | 2021-03-01 | 1109 | 1109 | f229g533h679 | nlocklea | Sales | East-196 |

| g567h376i314 | OS 3 | Email Client 1 | 2021-12-01 | 1110 | 1110 | g567h376i314 | pchaudhu | Sales | Central-428 |

| h835i179j862 | OS 2 | Email Client 2 | 2021-06-01 | 1111 | 1111 | h835i179j862 | jlee | Sales | West-309 |

| i772j807k175 | OS 2 | Email Client 1 | 2021-12-01 | 1112 | 1112 | i772j807k175 | ccruz | Information Technology | South-298 |

| j781k420l510 | OS 1 | Email Client 1 | 2021-09-01 | 1113 | 1113 | j781k420l510 | pjaimes | Human Resources | East-366 |

| l552m734n118 | OS 2 | Email Client 2 | 2021-03-01 | 1115 | 1115 | l552m734n118 | esmith2 | Information Technology | Central-204 |

| m272n572o874 | OS 3 | Email Client 2 | 2021-09-01 | 1116 | 1116 | m272n572o874 | nzhao | Sales | South-100 |

| n683o758p820 | OS 2 | Email Client 1 | 2021-12-01 | 1117 | 1117 | n683o758p820 | dahmad | Sales | West-405 |

| o305p208q337 | OS 3 | Email Client 2 | 2021-03-01 | 1118 | 1118 | o305p208q337 | jpark3 | Sales | South-329 |

| p164q780r999 | OS 3 | Email Client 2 | 2021-12-01 | 1119 | 1119 | p164q780r999 | omubarak | Sales | West-409 |

| q912r119s313 | OS 2 | Email Client 1 | 2021-06-01 | 1120 | 1120 | q912r119s313 | rbradsha | Marketing | Central-200 |

| r628s557t397 | OS 1 | Email Client 1 | 2021-12-01 | 1121 | 1121 | r628s557t397 | mrojas | Sales | East-288 |

| s103t952u851 | OS 2 | Email Client 2 | 2021-03-01 | 1122 | 1122 | s103t952u851 | btorres | Finance | West-319 |

| t479u468v151 | OS 1 | Email Client 1 | 2021-06-01 | 1123 | 1123 | t479u468v151 | ekonya | Human Resources | South-445 |

| u340v931w764 | OS 2 | Email Client 2 | 2021-09-01 | 1124 | 1124 | u340v931w764 | claw | Human Resources | Central-172 |

| v491w553x421 | OS 2 | Email Client 2 | 2021-03-01 | 1125 | 1125 | v491w553x421 | mrodgers | Marketing | South-490 |

| w190x708y760 | OS 3 | Email Client 2 | 2021-03-01 | 1126 | 1126 | w190x708y760 | lmiller | Information Technology | West-296 |

| x127y181z890 | OS 2 | Email Client 1 | 2021-06-01 | 1127 | 1127 | x127y181z890 | jterranc | Information Technology | Central-256 |

| y103z561a649 | OS 2 | Email Client 1 | 2021-03-01 | 1128 | 1128 | y103z561a649 | mpirato | Human Resources | West-205 |

| z566a147b347 | OS 1 | Email Client 1 | 2021-12-01 | 1129 | 1129 | z566a147b347 | plopez | Marketing | West-326 |

| a317b635c465 | OS 1 | Email Client 2 | 2021-03-01 | 1130 | 1130 | a317b635c465 | tsnow | Sales | Central-451 |

| b265c937d713 | OS 2 | Email Client 1 | 2021-09-01 | 1131 | 1131 | b265c937d713 | asierra | Information Technology | South-159 |

| c150d982e144 | OS 2 | Email Client 2 | 2021-06-01 | 1132 | 1132 | c150d982e144 | creddy | Human Resources | Central-210 |

| d693e351f221 | OS 2 | Email Client 2 | 2021-09-01 | 1133 | 1133 | d693e351f221 | pfrey | Marketing | Central-164 |

| e395f616g566 | OS 2 | Email Client 2 | 2021-03-01 | 1134 | 1134 | e395f616g566 | akhatri | Human Resources | West-159 |

| f934g229h883 | OS 2 | Email Client 2 | 2021-03-01 | 1135 | 1135 | f934g229h883 | khamamot | Information Technology | East-186 |

| g299h520i457 | OS 2 | Email Client 1 | 2021-09-01 | 1136 | 1136 | g299h520i457 | jhawes | Finance | West-416 |

| h165i539j638 | OS 3 | Email Client 1 | 2021-03-01 | 1137 | 1137 | h165i539j638 | mwood | Human Resources | South-166 |

| i671j355k725 | OS 2 | Email Client 2 | 2021-03-01 | 1138 | 1138 | i671j355k725 | sromero | Finance | South-329 |

| j637k986l199 | OS 2 | Email Client 1 | 2021-06-01 | 1139 | 1139 | j637k986l199 | emorton | Human Resources | North-300 |

| k982l199m839 | OS 2 | Email Client 2 | 2021-03-01 | 1140 | 1140 | k982l199m839 | apatel2 | Human Resources | East-385 |

| l282m821n717 | OS 1 | Email Client 1 | 2021-12-01 | 1141 | 1141 | l282m821n717 | cochuba | Human Resources | South-282 |

| m674n127o823 | OS 3 | Email Client 2 | 2021-03-01 | 1142 | 1142 | m674n127o823 | lsilva | Finance | East-440 |

| n704o364p471 | OS 2 | Email Client 2 | 2021-09-01 | 1143 | 1143 | n704o364p471 | sstark | Information Technology | East-282 |

| p752q137r169 | OS 3 | Email Client 2 | 2021-12-01 | 1145 | 1145 | p752q137r169 | msosa | Human Resources | South-345 |

| q228r135s755 | OS 1 | Email Client 2 | 2021-09-01 | 1146 | 1146 | q228r135s755 | ulemere | Human Resources | Central-171 |

| r454s225t299 | OS 2 | Email Client 2 | 2021-12-01 | 1147 | 1147 | r454s225t299 | tvega | Finance | West-177 |

| s328t505u907 | OS 3 | Email Client 2 | 2021-12-01 | 1148 | 1148 | s328t505u907 | dharvey | Finance | South-181 |

| t709u492v884 | OS 1 | Email Client 2 | 2021-06-01 | 1149 | 1149 | t709u492v884 | klim | Information Technology | South-411 |

| u554v512w139 | OS 1 | Email Client 1 | 2021-03-01 | 1150 | 1150 | u554v512w139 | lmarin | Marketing | Central-364 |

| v852w513x954 | OS 2 | Email Client 1 | 2021-12-01 | 1151 | 1151 | v852w513x954 | sshah | Human Resources | North-272 |

| x677y330z296 | OS 1 | Email Client 2 | 2021-06-01 | 1153 | 1153 | x677y330z296 | ncardena | Marketing | Central-363 |

| y765z123a548 | OS 2 | Email Client 2 | 2021-06-01 | 1154 | 1154 | y765z123a548 | obryand | Marketing | North-182 |

| z942a966b589 | OS 3 | Email Client 1 | 2021-09-01 | 1155 | 1155 | z942a966b589 | zjones | Human Resources | East-122 |

| a184b775c707 | OS 1 | Email Client 1 | 2021-09-01 | 1156 | 1156 | a184b775c707 | dellery | Marketing | East-417 |

| b264c773d977 | OS 2 | Email Client 2 | 2021-03-01 | 1157 | 1157 | b264c773d977 | lstein | Human Resources | Central-343 |

| c406d877e950 | OS 2 | Email Client 1 | 2021-06-01 | 1158 | 1158 | c406d877e950 | bnaser | Human Resources | Central-243 |

| d881e710f732 | OS 3 | Email Client 2 | 2021-03-01 | 1159 | 1159 | d881e710f732 | jshen | Finance | East-193 |

| e127f591g924 | OS 3 | Email Client 2 | 2021-12-01 | 1160 | 1160 | e127f591g924 | spham | Marketing | West-353 |

| f951g408h866 | OS 1 | Email Client 2 | 2021-03-01 | 1161 | 1161 | f951g408h866 | jjenkins | Information Technology | East-433 |

| g953h643i618 | OS 2 | Email Client 2 | 2021-06-01 | 1162 | 1162 | g953h643i618 | iortega | Information Technology | West-381 |

| h679i515j339 | OS 3 | Email Client 1 | 2021-09-01 | 1163 | 1163 | h679i515j339 | cwilliam | Marketing | East-216 |

| i682j513k442 | OS 3 | Email Client 1 | 2021-03-01 | 1164 | 1164 | i682j513k442 | fsmeltz | Finance | North-163 |

| j713k893l832 | OS 2 | Email Client 1 | 2021-03-01 | 1165 | 1165 | j713k893l832 | nwords | Marketing | South-128 |

| k495l234m708 | OS 1 | Email Client 2 | 2021-09-01 | 1166 | 1166 | k495l234m708 | nyoung | Marketing | Central-397 |

| l738m922n515 | OS 1 | Email Client 1 | 2021-03-01 | 1167 | 1167 | l738m922n515 | tblackwe | Marketing | North-443 |

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| m778n920o426 | OS 2          | Email Client 2 | 2021-06-01   |     1168 |     1168 |
m778n920o426 | jharris  | Information Technology | South-305   |

| o156p302q359 | OS 2          | Email Client 1 | 2021-03-01   |     1170 |     1170 |
o156p302q359 | lalvarez | Human Resources      | North-278   |

| p834q238r776 | OS 3          | Email Client 2 | 2021-03-01   |     1171 |     1171 |
p834q238r776 | plopez2  | Information Technology | Central-496 |

| q372r826s628 | OS 2          | Email Client 1 | 2021-09-01   |     1172 |     1172 |
q372r826s628 | akhan    | Marketing            | Central-360 |

| r537s849t690 | OS 1          | Email Client 2 | 2021-09-01   |     1173 |     1173 |
r537s849t690 | ialcazar | Marketing            | South-429   |

| s371t911u987 | OS 1          | Email Client 2 | 2021-06-01   |     1174 |     1174 |
s371t911u987 | eortiz   | Finance              | North-428   |

| t959u687v394 | OS 2          | Email Client 2 | 2021-06-01   |     1175 |     1175 |
t959u687v394 | jclark2  | Finance              | North-194   |

| u849v569w521 | OS 2          | Email Client 1 | 2021-06-01   |     1176 |     1176 |
u849v569w521 | nliu     | Sales                | West-220    |

| v691w183x928 | OS 1          | Email Client 2 | 2021-09-01   |     1177 |     1177 |
v691w183x928 | aezra    | Human Resources      | East-190    |

| w986x187y885 | OS 3          | Email Client 2 | 2021-12-01   |     1178 |     1178 |
w986x187y885 | nlannist | Marketing            | North-196   |

| x174y934z376 | OS 1          | Email Client 2 | 2021-06-01   |     1179 |     1179 |
x174y934z376 | asalas   | Human Resources      | North-445   |

| y131z211a578 | OS 2          | Email Client 1 | 2021-03-01   |     1180 |     1180 |
y131z211a578 | medwards | Human Resources      | Central-340 |

| z803a233b718 | OS 1          | Email Client 2 | 2021-12-01   |     1181 |     1181 |
z803a233b718 | sessa    | Finance              | South-207   |

| a305b818c708 | OS 3          | Email Client 2 | 2021-06-01   |     1182 |     1182 |
a305b818c708 | mmora    | Information Technology | Central-250 |

| b566c710d544 | OS 1          | Email Client 1 | 2021-06-01   |     1183 |     1183 |
b566c710d544 | lquraish | Human Resources      | East-400    |
```

c986d200e170	OS 2	Email Client 2	2021-09-01	1184	1184	c986d200e170	ptsosie	Human Resources	Central-247
d790e839f461	OS 1	Email Client 1	2021-06-01	1185	1185	d790e839f461	revens	Sales	North-330
e281f433g404	OS 1	Email Client 2	2021-12-01	1186	1186	e281f433g404	sacosta	Sales	North-460
f963g637h851	OS 1	Email Client 1	2021-06-01	1187	1187	f963g637h851	bbode	Finance	East-351
g164h566i795	OS 1	Email Client 1	2021-09-01	1188	1188	g164h566i795	noshiro	Finance	West-252
h784i120j837	OS 3	Email Client 2	2021-12-01	1189	1189	h784i120j837	slefkowi	Human Resources	West-342
k570l183m949	OS 3	Email Client 1	2021-12-01	1192	1192	k570l183m949	rlaghari	Information Technology	East-138
l186m618n319	OS 1	Email Client 2	2021-12-01	1193	1193	l186m618n319	esantiag	Information Technology	Central-300
m340n287o441	OS 2	Email Client 2	2021-09-01	1194	1194	m340n287o441	zwarren	Human Resources	West-212
n516o853p957	OS 1	Email Client 1	2021-09-01	1195	1195	n516o853p957	orainier	Finance	East-346
o225p357q829	OS 3	Email Client 1	2021-12-01	1196	1196	o225p357q829	sshah2	Information Technology	South-385
p791q114r509	OS 2	Email Client 1	2021-09-01	1197	1197	p791q114r509	aabara	Information Technology	North-159
q308r573s459	OS 3	Email Client 1	2021-03-01	1198	1198	q308r573s459	jmartine	Marketing	South-117
r520s571t459	OS 2	Email Client 2	2021-03-01	1199	1199	r520s571t459	areyes	Human Resources	East-100
a398b471c573	OS 3	Email Client 2	2021-12-01	0	NULL	NULL	NULL	NULL	NULL

b157c491d493	OS 2	Email Client 1	2021-03-01	0	NULL	NULL	NULL	NULL	NULL
c185d679e493	OS 1	Email Client 2	2021-09-01	0	NULL	NULL	NULL	NULL	NULL
d280e557f635	OS 3	Email Client 1	2021-03-01	0	NULL	NULL	NULL	NULL	NULL
e121f951g937	OS 3	Email Client 2	2021-06-01	0	NULL	NULL	NULL	NULL	NULL
f117g394h201	OS 1	Email Client 2	2021-03-01	0	NULL	NULL	NULL	NULL	NULL
g770h829i938	OS 2	Email Client 1	2021-09-01	0	NULL	NULL	NULL	NULL	NULL
s918t412u294	OS 3	Email Client 2	2021-12-01	0	NULL	NULL	NULL	NULL	NULL
t801u630v138	OS 2	Email Client 2	2021-03-01	0	NULL	NULL	NULL	NULL	NULL
u113v483w811	OS 3	Email Client 2	2021-06-01	0	NULL	NULL	NULL	NULL	NULL
v846w200x439	OS 1	Email Client 1	2021-06-01	0	NULL	NULL	NULL	NULL	NULL
w981x771y326	OS 2	Email Client 2	2021-06-01	0	NULL	NULL	NULL	NULL	NULL
x561y839z458	OS 2	Email Client 1	2021-09-01	0	NULL	NULL	NULL	NULL	NULL
y246z508a775	OS 2	Email Client 1	2021-12-01	0	NULL	NULL	NULL	NULL	NULL
z821a946b264	OS 3	Email Client 2	2021-06-01	0	NULL	NULL	NULL	NULL	NULL

```
+-------------+----------------+---------------+-------------+------------+------------+-------------+----------+---------------------+-------------+
```

200 rows in set (0.008 sec)

MariaDB [organization]>

MariaDB [organization]>

MariaDB [organization]> SELECT *

  -> FROM machines

  -> right JOIN employees ON machines.device_id = employees.device_id;

```
+--------------+----------------+---------------+--------------+------------+------------+-------------+----------+----------------------+------------+
| device_id    | operating_system | email_client | OS_patch_date | employee_id | employee_id | device_id  | username | department           | office     |
+--------------+----------------+---------------+--------------+------------+------------+-------------+----------+----------------------+------------+
| a320b137c219 | OS 2           | Email Client 2 | 2021-03-01   |     1000 |     1000 | a320b137c219 | elarson  | Marketing            | East-170   |
| b239c825d303 | OS 1           | Email Client 1 | 2021-03-01   |     1001 |     1001 | b239c825d303 | bmoreno  | Marketing            | Central-276 |
| c116d593e558 | OS 3           | Email Client 1 | 2021-09-01   |     1002 |     1002 | c116d593e558 | tshah    | Human Resources      | North-434  |
| d394e816f943 | OS 3           | Email Client 2 | 2021-03-01   |     1003 |     1003 | d394e816f943 | sgilmore | Finance              | South-153  |
| e218f877g788 | OS 2           | Email Client 1 | 2021-09-01   |     1004 |     1004 | e218f877g788 | eraab    | Human Resources      | South-127  |
| f551g340h864 | OS 3           | Email Client 2 | 2021-12-01   |     1005 |     1005 | f551g340h864 | gesparza | Human Resources      | South-366  |
| g329h357i597 | OS 1           | Email Client 2 | 2021-06-01   |     1006 |     1006 | g329h357i597 | alevitsk | Information Technology | East-320 |
| h174i497j413 | OS 2           | Email Client 1 | 2021-03-01   |     1007 |     1007 | h174i497j413 | wjaffrey | Finance              | North-406  |
| i858j583k571 | OS 2           | Email Client 2 | 2021-06-01   |     1008 |     1008 | i858j583k571 | abernard | Finance              | South-170  |
```

NULL	NULL	NULL	NULL	NULL	1009	NULL	lrodriqu	Sales	South-134
k242l212m542	OS 1	Email Client 1	2021-03-01	1010	1010	k242l212m542	jlansky	Finance	South-109
l748m120n401	OS 3	Email Client 1	2021-09-01	1011	1011	l748m120n401	drosas	Sales	South-292
m756n668o146	OS 1	Email Client 2	2021-09-01	1012	1012	m756n668o146	nmason	Information Technology	North-160
n205o559p243	OS 1	Email Client 2	2021-06-01	1013	1013	n205o559p243	zbernal	Information Technology	South-229
NULL	NULL	NULL	NULL	NULL	1014	NULL	asundara	Information Technology	West-219
p611q262r945	OS 1	Email Client 2	2021-03-01	1015	1015	p611q262r945	jsoto	Finance	North-271
q793r736s288	OS 2	Email Client 1	2021-03-01	1016	1016	q793r736s288	sbaelish	Human Resources	North-229
r550s824t230	OS 2	Email Client 1	2021-03-01	1017	1017	r550s824t230	jclark	Finance	North-188
s310t540u653	OS 1	Email Client 2	2021-12-01	1018	1018	s310t540u653	abellmas	Finance	North-403
t815u205v470	OS 3	Email Client 1	2021-06-01	1019	1019	t815u205v470	mcouliba	Information Technology	North-108
u899v381w363	OS 3	Email Client 1	2021-06-01	1020	1020	u899v381w363	arutley	Marketing	South-351
v200w121x977	OS 2	Email Client 2	2021-03-01	1021	1021	v200w121x977	smartell	Information Technology	South-138
w237x430y567	OS 2	Email Client 2	2021-06-01	1022	1022	w237x430y567	arusso	Finance	West-465
x253y759z103	OS 1	Email Client 2	2021-12-01	1023	1023	x253y759z103	aalonso	Information Technology	West-393

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| y976z753a267 | OS 2        | Email Client 2 | 2021-06-01  |      1024 |      1024 |
y976z753a267 | iuduike  | Sales              | South-215   |

| z381a365b233 | OS 3        | Email Client 2 | 2021-12-01  |      1025 |      1025 |
z381a365b233 | jhill    | Sales              | North-115   |

| a998b568c863 | OS 3        | Email Client 1 | 2021-12-01  |      1026 |      1026 |
a998b568c863 | apatel   | Human Resources        | West-320   |

| b806c503d354 | OS 2        | Email Client 1 | 2021-12-01  |      1027 |      1027 |
b806c503d354 | mrah     | Marketing          | West-246   |

| c603d749e374 | OS 1        | Email Client 1 | 2021-12-01  |      1028 |      1028 |
c603d749e374 | aestrada | Human Resources      | West-121   |

| d336e475f676 | OS 2        | Email Client 2 | 2021-06-01  |      1029 |      1029 |
d336e475f676 | ivelasco | Finance            | East-156   |

| e391f189g913 | OS 3        | Email Client 2 | 2021-12-01  |      1030 |      1030 |
e391f189g913 | mabadi   | Marketing          | West-375   |

| f419g188h578 | OS 1        | Email Client 1 | 2021-06-01  |      1031 |      1031 |
f419g188h578 | dkot     | Marketing          | West-408   |

| g773h303i639 | OS 2        | Email Client 2 | 2021-12-01  |      1032 |      1032 |
g773h303i639 | jrafael  | Information Technology | Central-309 |

| NULL     | NULL        | NULL     | NULL     |      NULL |      1033 | NULL       | yappiah  |
Information Technology | West-387    |

| i679j565k940 | OS 1        | Email Client 1 | 2021-03-01  |      1034 |      1034 |
i679j565k940 | bsand    | Human Resources      | East-484   |

| j236k303l245 | OS 1        | Email Client 1 | 2021-12-01  |      1035 |      1035 |
j236k303l245 | bisles   | Sales              | South-171   |

| k550l533m205 | OS 3        | Email Client 2 | 2021-09-01  |      1036 |      1036 |
k550l533m205 | rjensen  | Marketing          | Central-239 |

| l693m585n528 | OS 3        | Email Client 1 | 2021-06-01  |      1037 |      1037 |
l693m585n528 | dtanaka  | Information Technology | West-468    |

| m873n636o225 | OS 1        | Email Client 2 | 2021-06-01  |      1038 |      1038 |
m873n636o225 | btang    | Human Resources      | Central-260 |
```

n253o917p623	OS 1	Email Client 2	2021-09-01	1039	1039	n253o917p623	cjackson	Sales	East-378
o783p832q294	OS 2	Email Client 2	2021-09-01	1040	1040	o783p832q294	dtarly	Human Resources	East-237
p929q222r778	OS 3	Email Client 1	2021-06-01	1041	1041	p929q222r778	cgriffin	Sales	North-208
q175r338s833	OS 3	Email Client 1	2021-06-01	1042	1042	q175r338s833	acook	Human Resources	West-381
NULL	NULL	NULL	NULL	NULL	1043	NULL	lyamamot	Information Technology	East-354
s429t157u159	OS 1	Email Client 1	2021-03-01	1044	1044	s429t157u159	tbarnes	Finance	West-415
t567u844v434	OS 3	Email Client 2	2021-12-01	1045	1045	t567u844v434	pwashing	Finance	East-115
u429v921w138	OS 2	Email Client 2	2021-12-01	1046	1046	u429v921w138	daquino	Finance	West-280
v109w587x644	OS 2	Email Client 2	2021-03-01	1047	1047	v109w587x644	cward	Finance	West-373
w167x592y375	OS 3	Email Client 1	2021-12-01	1048	1048	w167x592y375	tmitchel	Finance	South-288
NULL	NULL	NULL	NULL	NULL	1049	NULL	jreckley	Finance	Central-295
y132z930a114	OS 2	Email Client 2	2021-06-01	1050	1050	y132z930a114	csimmons	Finance	North-468
z451a308b518	OS 2	Email Client 1	2021-03-01	1051	1051	z451a308b518	itraora	Marketing	Central-134
a192b174c940	OS 2	Email Client 1	2021-06-01	1052	1052	a192b174c940	jdarosa	Marketing	East-195
b979c871d361	OS 2	Email Client 1	2021-03-01	1053	1053	b979c871d361	nemmanue	Human Resources	Central-259

| c547d140e477 | OS 2 | Email Client 1 | 2021-03-01 | 1054 | 1054 | c547d140e477 | tcook | Information Technology | West-248 |

| d831e972f553 | OS 1 | Email Client 1 | 2021-09-01 | 1055 | 1055 | d831e972f553 | awilliam | Marketing | Central-256 |

| e782f537g683 | OS 1 | Email Client 1 | 2021-03-01 | 1056 | 1056 | e782f537g683 | ankala | Marketing | North-139 |

| f370g535h632 | OS 2 | Email Client 2 | 2021-09-01 | 1057 | 1057 | f370g535h632 | mscott | Sales | South-270 |

| g264h852i697 | OS 3 | Email Client 1 | 2021-03-01 | 1058 | 1058 | g264h852i697 | madebowa | Marketing | South-119 |

| h832i322j795 | OS 1 | Email Client 1 | 2021-09-01 | 1059 | 1059 | h832i322j795 | jnguyen | Marketing | South-255 |

| i446j874k974 | OS 3 | Email Client 1 | 2021-03-01 | 1060 | 1060 | i446j874k974 | tbecker | Information Technology | North-164 |

| j255k281l925 | OS 3 | Email Client 1 | 2021-06-01 | 1061 | 1061 | j255k281l925 | nhersh | Human Resources | East-163 |

| k367l639m697 | OS 1 | Email Client 1 | 2021-12-01 | 1062 | 1062 | k367l639m697 | redwards | Finance | North-180 |

| l686m140n569 | OS 3 | Email Client 2 | 2021-12-01 | 1063 | 1063 | l686m140n569 | lpope | Sales | East-226 |

| NULL | NULL | NULL | NULL | NULL | 1064 | NULL | ejones | Marketing | South-477 |

| n428o322p522 | OS 1 | Email Client 1 | 2021-12-01 | 1065 | 1065 | n428o322p522 | imoore | Human Resources | West-490 |

| o678p794q957 | OS 1 | Email Client 1 | 2021-09-01 | 1066 | 1066 | o678p794q957 | ttyrell | Sales | Central-444 |

| p288q432r721 | OS 3 | Email Client 2 | 2021-12-01 | 1067 | 1067 | p288q432r721 | lwhite | Marketing | North-277 |

| q689r187s648 | OS 2 | Email Client 1 | 2021-12-01 | 1068 | 1068 | q689r187s648 | djames | Information Technology | West-438 |

NULL	NULL	NULL	NULL	NULL	1069	NULL	jpark	Finance	East-110
s772t175u409	OS 1	Email Client 1	2021-06-01	1070	1070	s772t175u409	tbailey	Human Resources	North-204
t244u829v723	OS 1	Email Client 2	2021-06-01	1071	1071	t244u829v723	zdutchma	Sales	West-348
u905v920w694	OS 1	Email Client 1	2021-09-01	1072	1072	u905v920w694	esmith	Sales	East-421
v135w241x773	OS 2	Email Client 2	2021-12-01	1073	1073	v135w241x773	srobinso	Marketing	Central-494
w622x645y348	OS 3	Email Client 1	2021-03-01	1074	1074	w622x645y348	dcoleman	Information Technology	East-126
x573y883z772	OS 1	Email Client 1	2021-12-01	1075	1075	x573y883z772	fbautist	Marketing	East-267
y347z204a710	OS 2	Email Client 2	2021-12-01	1076	1076	y347z204a710	fgarcia	Finance	Central-270
z654a154b259	OS 2	Email Client 2	2021-12-01	1077	1077	z654a154b259	ldavis	Human Resources	East-241
a667b270c984	OS 1	Email Client 1	2021-03-01	1078	1078	a667b270c984	sharley	Sales	North-418
b433c245d868	OS 1	Email Client 1	2021-06-01	1079	1079	b433c245d868	gmedina	Marketing	North-456
c568d742e974	OS 2	Email Client 2	2021-09-01	1080	1080	c568d742e974	gmoon	Marketing	North-156
d647e310f618	OS 2	Email Client 2	2021-06-01	1081	1081	d647e310f618	qcorbit	Finance	South-290
e301f659g551	OS 3	Email Client 2	2021-12-01	1082	1082	e301f659g551	mjohnson	Information Technology	East-151
f840g812h544	OS 1	Email Client 2	2021-12-01	1083	1083	f840g812h544	gkoshi	Finance	West-165

g950h972i991	OS 2	Email Client 1	2021-12-01	1084	1084	g950h972i991	nhuynh	Human Resources	South-155
h339i498j269	OS 1	Email Client 1	2021-03-01	1085	1085	h339i498j269	cperez	Sales	East-325
i281j129k749	OS 3	Email Client 1	2021-06-01	1086	1086	i281j129k749	lmajumda	Sales	West-499
j803k645l251	OS 2	Email Client 1	2021-12-01	1087	1087	j803k645l251	ibisset	Information Technology	North-230
k865l965m233	OS 3	Email Client 2	2021-12-01	1088	1088	k865l965m233	rgosh	Marketing	East-157
l358m929n154	OS 3	Email Client 2	2021-03-01	1089	1089	l358m929n154	jpark2	Sales	West-251
m891n748o375	OS 2	Email Client 2	2021-12-01	1090	1090	m891n748o375	cpatel	Information Technology	South-351
n378o313p469	OS 3	Email Client 2	2021-12-01	1091	1091	n378o313p469	rtran	Sales	Central-230
o391p779q935	OS 1	Email Client 2	2021-06-01	1092	1092	o391p779q935	lpark	Sales	West-227
p765q957r699	OS 2	Email Client 1	2021-06-01	1093	1093	p765q957r699	etargary	Human Resources	Central-247
NULL	NULL	NULL	NULL	NULL	1094	NULL	hhadzic	Information Technology	Central-463
r194s893t593	OS 1	Email Client 2	2021-06-01	1095	1095	r194s893t593	glopez	Information Technology	East-457
s375t538u194	OS 2	Email Client 1	2021-12-01	1096	1096	s375t538u194	kjeffers	Information Technology	East-419
t363u179v368	OS 3	Email Client 2	2021-03-01	1097	1097	t363u179v368	jlee	Human Resources	South-254
u671v146w618	OS 1	Email Client 2	2021-09-01	1098	1098	u671v146w618	tarchamb	Sales	North-423

v283w690x104	OS 1	Email Client 1	2021-03-01	1099	1099	v283w690x104	anaser	Finance	West-357
w326x611y598	OS 1	Email Client 2	2021-03-01	1100	1100	w326x611y598	mjin	Human Resources	Central-371
x701y250z303	OS 3	Email Client 2	2021-03-01	1101	1101	x701y250z303	ichowdhu	Human Resources	East-233
y943z930a241	OS 1	Email Client 2	2021-09-01	1102	1102	y943z930a241	kselassi	Marketing	South-378
NULL	NULL	NULL	NULL	NULL	1103	NULL	randerss	Marketing	East-460
a821b452c176	OS 2	Email Client 2	2021-12-01	1104	1104	a821b452c176	mreed	Information Technology	West-288
b551c837d758	OS 3	Email Client 1	2021-03-01	1105	1105	b551c837d758	kmei	Finance	Central-232
c597d792e215	OS 2	Email Client 1	2021-09-01	1106	1106	c597d792e215	jcohen	Marketing	South-395
d168e758f876	OS 2	Email Client 1	2021-09-01	1107	1107	d168e758f876	akajwara	Sales	North-471
e113f288g203	OS 2	Email Client 2	2021-03-01	1108	1108	e113f288g203	jwashing	Human Resources	North-226
f229g533h679	OS 2	Email Client 2	2021-03-01	1109	1109	f229g533h679	nlocklea	Sales	East-196
g567h376i314	OS 3	Email Client 1	2021-12-01	1110	1110	g567h376i314	pchaudhu	Sales	Central-428
h835i179j862	OS 2	Email Client 2	2021-06-01	1111	1111	h835i179j862	jlee	Sales	West-309
i772j807k175	OS 2	Email Client 1	2021-12-01	1112	1112	i772j807k175	ccruz	Information Technology	South-298
j781k420l510	OS 1	Email Client 1	2021-09-01	1113	1113	j781k420l510	pjaimes	Human Resources	East-366

l552m734n118	OS 2	Email Client 2	2021-03-01	1115	1115	l552m734n118	esmith2	Information Technology	Central-204
NULL	NULL	NULL	NULL	NULL	1114	NULL	xgreene	Marketing	North-335
l552m734n118	OS 2	Email Client 2	2021-03-01	1115	1115	l552m734n118	esmith2	Information Technology	Central-204
m272n572o874	OS 3	Email Client 2	2021-09-01	1116	1116	m272n572o874	nzhao	Sales	South-100
n683o758p820	OS 2	Email Client 1	2021-12-01	1117	1117	n683o758p820	dahmad	Sales	West-405
o305p208q337	OS 3	Email Client 2	2021-03-01	1118	1118	o305p208q337	jpark3	Sales	South-329
p164q780r999	OS 3	Email Client 2	2021-12-01	1119	1119	p164q780r999	omubarak	Sales	West-409
q912r119s313	OS 2	Email Client 1	2021-06-01	1120	1120	q912r119s313	rbradsha	Marketing	Central-200
r628s557t397	OS 1	Email Client 1	2021-12-01	1121	1121	r628s557t397	mrojas	Sales	East-288
s103t952u851	OS 2	Email Client 2	2021-03-01	1122	1122	s103t952u851	btorres	Finance	West-319
t479u468v151	OS 1	Email Client 1	2021-06-01	1123	1123	t479u468v151	ekonya	Human Resources	South-445
u340v931w764	OS 2	Email Client 2	2021-09-01	1124	1124	u340v931w764	claw	Human Resources	Central-172
v491w553x421	OS 2	Email Client 2	2021-03-01	1125	1125	v491w553x421	mrodgers	Marketing	South-490
w190x708y760	OS 3	Email Client 2	2021-03-01	1126	1126	w190x708y760	lmiller	Information Technology	West-296
x127y181z890	OS 2	Email Client 1	2021-06-01	1127	1127	x127y181z890	jterranc	Information Technology	Central-256
y103z561a649	OS 2	Email Client 1	2021-03-01	1128	1128	y103z561a649	mpirato	Human Resources	West-205

z566a147b347	OS 1	Email Client 1	2021-12-01	1129	1129	z566a147b347	plopez	Marketing	West-326
a317b635c465	OS 1	Email Client 2	2021-03-01	1130	1130	a317b635c465	tsnow	Sales	Central-451
b265c937d713	OS 2	Email Client 1	2021-09-01	1131	1131	b265c937d713	asierra	Information Technology	South-159
c150d982e144	OS 2	Email Client 2	2021-06-01	1132	1132	c150d982e144	creddy	Human Resources	Central-210
d693e351f221	OS 2	Email Client 2	2021-09-01	1133	1133	d693e351f221	pfrey	Marketing	Central-164
e395f616g566	OS 2	Email Client 2	2021-03-01	1134	1134	e395f616g566	akhatri	Human Resources	West-159
f934g229h883	OS 2	Email Client 2	2021-03-01	1135	1135	f934g229h883	khamamot	Information Technology	East-186
g299h520i457	OS 2	Email Client 1	2021-09-01	1136	1136	g299h520i457	jhawes	Finance	West-416
h165i539j638	OS 3	Email Client 1	2021-03-01	1137	1137	h165i539j638	mwood	Human Resources	South-166
i671j355k725	OS 2	Email Client 2	2021-03-01	1138	1138	i671j355k725	sromero	Finance	South-329
j637k986l199	OS 2	Email Client 1	2021-06-01	1139	1139	j637k986l199	emorton	Human Resources	North-300
k982l199m839	OS 2	Email Client 2	2021-03-01	1140	1140	k982l199m839	apatel2	Human Resources	East-385
l282m821n717	OS 1	Email Client 1	2021-12-01	1141	1141	l282m821n717	cochuba	Human Resources	South-282
m674n127o823	OS 3	Email Client 2	2021-03-01	1142	1142	m674n127o823	lsilva	Finance	East-440
n704o364p471	OS 2	Email Client 2	2021-09-01	1143	1143	n704o364p471	sstark	Information Technology	East-282

NULL	NULL	NULL	NULL	NULL	1144	NULL	erobinso	Finance	Central-266
p752q137r169	OS 3	Email Client 2	2021-12-01	1145	1145	p752q137r169	msosa	Human Resources	South-345
q228r135s755	OS 1	Email Client 2	2021-09-01	1146	1146	q228r135s755	ulemere	Human Resources	Central-171
r454s225t299	OS 2	Email Client 2	2021-12-01	1147	1147	r454s225t299	tvega	Finance	West-177
s328t505u907	OS 3	Email Client 2	2021-12-01	1148	1148	s328t505u907	dharvey	Finance	South-181
t709u492v884	OS 1	Email Client 2	2021-06-01	1149	1149	t709u492v884	klim	Information Technology	South-411
u554v512w139	OS 1	Email Client 1	2021-03-01	1150	1150	u554v512w139	lmarin	Marketing	Central-364
v852w513x954	OS 2	Email Client 1	2021-12-01	1151	1151	v852w513x954	sshah	Human Resources	North-272
NULL	NULL	NULL	NULL	NULL	1152	NULL	nwilliam	Marketing	Central-170
x677y330z296	OS 1	Email Client 2	2021-06-01	1153	1153	x677y330z296	ncardena	Marketing	Central-363
y765z123a548	OS 2	Email Client 2	2021-06-01	1154	1154	y765z123a548	obryand	Marketing	North-182
z942a966b589	OS 3	Email Client 1	2021-09-01	1155	1155	z942a966b589	zjones	Human Resources	East-122
a184b775c707	OS 1	Email Client 1	2021-09-01	1156	1156	a184b775c707	dellery	Marketing	East-417
b264c773d977	OS 2	Email Client 2	2021-03-01	1157	1157	b264c773d977	lstein	Human Resources	Central-343
c406d877e950	OS 2	Email Client 1	2021-06-01	1158	1158	c406d877e950	bnaser	Human Resources	Central-243

d881e710f732	OS 3	Email Client 2	2021-03-01	1159	1159	d881e710f732	jshen	Finance	East-193
e127f591g924	OS 3	Email Client 2	2021-12-01	1160	1160	e127f591g924	spham	Marketing	West-353
f951g408h866	OS 1	Email Client 2	2021-03-01	1161	1161	f951g408h866	jjenkins	Information Technology	East-433
g953h643i618	OS 2	Email Client 2	2021-06-01	1162	1162	g953h643i618	iortega	Information Technology	West-381
h679i515j339	OS 3	Email Client 1	2021-09-01	1163	1163	h679i515j339	cwilliam	Marketing	East-216
i682j513k442	OS 3	Email Client 1	2021-03-01	1164	1164	i682j513k442	fsmeltz	Finance	North-163
j713k893l832	OS 2	Email Client 1	2021-03-01	1165	1165	j713k893l832	nwords	Marketing	South-128
k495l234m708	OS 1	Email Client 2	2021-09-01	1166	1166	k495l234m708	nyoung	Marketing	Central-397
l738m922n515	OS 1	Email Client 1	2021-03-01	1167	1167	l738m922n515	tblackwe	Marketing	North-443
m778n920o426	OS 2	Email Client 2	2021-06-01	1168	1168	m778n920o426	jharris	Information Technology	South-305
NULL	NULL	NULL	NULL	NULL	1169	NULL	mmitchel	Sales	Central-250
o156p302q359	OS 2	Email Client 1	2021-03-01	1170	1170	o156p302q359	lalvarez	Human Resources	North-278
p834q238r776	OS 3	Email Client 2	2021-03-01	1171	1171	p834q238r776	plopez2	Information Technology	Central-496
q372r826s628	OS 2	Email Client 1	2021-09-01	1172	1172	q372r826s628	akhan	Marketing	Central-360
r537s849t690	OS 1	Email Client 2	2021-09-01	1173	1173	r537s849t690	ialcazar	Marketing	South-429

| s371t911u987 | OS 1 | Email Client 2 | 2021-06-01 | 1174 | 1174 | s371t911u987 | eortiz | Finance | North-428 |

| t959u687v394 | OS 2 | Email Client 2 | 2021-06-01 | 1175 | 1175 | t959u687v394 | jclark2 | Finance | North-194 |

| u849v569w521 | OS 2 | Email Client 1 | 2021-06-01 | 1176 | 1176 | u849v569w521 | nliu | Sales | West-220 |

| v691w183x928 | OS 1 | Email Client 2 | 2021-09-01 | 1177 | 1177 | v691w183x928 | aezra | Human Resources | East-190 |

| w986x187y885 | OS 3 | Email Client 2 | 2021-12-01 | 1178 | 1178 | w986x187y885 | nlannist | Marketing | North-196 |

| x174y934z376 | OS 1 | Email Client 2 | 2021-06-01 | 1179 | 1179 | x174y934z376 | asalas | Human Resources | North-445 |

| y131z211a578 | OS 2 | Email Client 1 | 2021-03-01 | 1180 | 1180 | y131z211a578 | medwards | Human Resources | Central-340 |

| z803a233b718 | OS 1 | Email Client 2 | 2021-12-01 | 1181 | 1181 | z803a233b718 | sessa | Finance | South-207 |

| a305b818c708 | OS 3 | Email Client 2 | 2021-06-01 | 1182 | 1182 | a305b818c708 | mmora | Information Technology | Central-250 |

| b566c710d544 | OS 1 | Email Client 1 | 2021-06-01 | 1183 | 1183 | b566c710d544 | lquraish | Human Resources | East-400 |

| c986d200e170 | OS 2 | Email Client 2 | 2021-09-01 | 1184 | 1184 | c986d200e170 | ptsosie | Human Resources | Central-247 |

| d790e839f461 | OS 1 | Email Client 1 | 2021-06-01 | 1185 | 1185 | d790e839f461 | revens | Sales | North-330 |

| e281f433g404 | OS 1 | Email Client 2 | 2021-12-01 | 1186 | 1186 | e281f433g404 | sacosta | Sales | North-460 |

| f963g637h851 | OS 1 | Email Client 1 | 2021-06-01 | 1187 | 1187 | f963g637h851 | bbode | Finance | East-351 |

| g164h566i795 | OS 1 | Email Client 1 | 2021-09-01 | 1188 | 1188 | g164h566i795 | noshiro | Finance | West-252 |

| h784i120j837 | OS 3 | Email Client 2 | 2021-12-01 | 1189 | 1189 | h784i120j837 | slefkowi | Human Resources | West-342 |

| NULL | NULL | NULL | NULL | NULL | 1190 | NULL | kcarter | Marketing | Central-270 |

| NULL | NULL | NULL | NULL | NULL | 1191 | NULL | shakimi | Marketing | Central-366 |

| k570l183m949 | OS 3 | Email Client 1 | 2021-12-01 | 1192 | 1192 | k570l183m949 | rlaghari | Information Technology | East-138 |

| l186m618n319 | OS 1 | Email Client 2 | 2021-12-01 | 1193 | 1193 | l186m618n319 | esantiag | Information Technology | Central-300 |

| m340n287o441 | OS 2 | Email Client 2 | 2021-09-01 | 1194 | 1194 | m340n287o441 | zwarren | Human Resources | West-212 |

| n516o853p957 | OS 1 | Email Client 1 | 2021-09-01 | 1195 | 1195 | n516o853p957 | orainier | Finance | East-346 |

| o225p357q829 | OS 3 | Email Client 1 | 2021-12-01 | 1196 | 1196 | o225p357q829 | sshah2 | Information Technology | South-385 |

| p791q114r509 | OS 2 | Email Client 1 | 2021-09-01 | 1197 | 1197 | p791q114r509 | aabara | Information Technology | North-159 |

| q308r573s459 | OS 3 | Email Client 1 | 2021-03-01 | 1198 | 1198 | q308r573s459 | jmartine | Marketing | South-117 |

| r520s571t459 | OS 2 | Email Client 2 | 2021-03-01 | 1199 | 1199 | r520s571t459 | areyes | Human Resources | East-100 |

+-------------+----------------+---------------+--------------+------------+------------+-------------+----------+----------------------+-------------+

200 rows in set (0.001 sec)

MariaDB [organization]>

Task 3. Retrieve login attempt data

To continue investigating the security incident, you must retrieve the information on all employees who have made login attempts. To achieve this, you'll perform an inner join on the `employees` and `log_in_attempts` tables, linking them on the common `username` column.

- Run the following SQL query to perform an inner join on the `employees` and `log_in_attempts` tables. Replace X with the name of the right table. Then replace Y and Z with the name of the column that connects the two tables:

```
SELECT *
FROM employees
INNER JOIN X ON Y = Z;
```

Copied!

Note: You must specify the table name with the column name (table.column) when joining the tables.

How many records are returned by this inner join?

210

175

145

check200

Click **Check my progress** to verify that you have completed this task correctly.

> You have completed this task and run a query that returns the information on all employees who have made login attempts!

Retrieve login attempt data

You have completed this task and run a query that returns the information on all employees who have made login attempts!

MariaDB [organization]> SELECT *

   -> FROM employees

   -> INNER JOIN log_in_attempts ON username = username ;

ERROR 1052 (23000): Column 'username' in on clause is ambiguous

MariaDB [organization]> SELECT * FROM employees INNER JOIN log_in_attempts ON username = username;

ERROR 1052 (23000): Column 'username' in on clause is ambiguous

MariaDB [organization]> SELECT * FROM employees INNER JOIN log_in_attempts ON username = log_in_attempts.username;

ERROR 1052 (23000): Column 'username' in on clause is ambiguous

MariaDB [organization]> SELECT * FROM employees INNER JOIN log_in_attempts ON employees.username = log_in_attempts.username;

```
+-------------+--------------+----------+----------------------+-------------+----------+----------+------------+------------+----------+----------------+---------+
| employee_id | device_id    | username | department           | office      | event_id | username | login_date | login_time | country  | ip_address     | success |
+-------------+--------------+----------+----------------------+-------------+----------+----------+------------+------------+----------+----------------+---------+
|        1032 | g773h303i639 | jrafael  | Information Technology | Central-309 |        1 | jrafael  | 2022-05-09 | 04:56:27   | CAN      | 192.168.243.140 |       0 |
|        1026 | a998b568c863 | apatel   | Human Resources       | West-320    |        2 | apatel   | 2022-05-10 | 20:27:27   | CAN      | 192.168.205.12  |       0 |
|        1031 | f419g188h578 | dkot     | Marketing             | West-408    |        3 | dkot     | 2022-05-09 | 06:47:41   | USA      | 192.168.151.162 |       0 |
|        1031 | f419g188h578 | dkot     | Marketing             | West-408    |        4 | dkot     | 2022-05-08 | 02:00:39   | USA      | 192.168.178.71  |       0 |
|        1032 | g773h303i639 | jrafael  | Information Technology | Central-309 |        5 | jrafael  | 2022-05-11 | 03:05:59   | CANADA   | 192.168.86.232  |       0 |
|        1020 | u899v381w363 | arutley  | Marketing             | South-351   |        6 | arutley  | 2022-05-12 | 17:00:59   | MEXICO   | 192.168.3.24    |       0 |
|        1004 | e218f877g788 | eraab    | Human Resources       | South-127   |        7 | eraab    | 2022-05-11 | 01:45:14   | CAN      | 192.168.170.243 |       0 |
|        1035 | j236k303l245 | bisles   | Sales                 | South-171   |        8 | bisles   | 2022-05-08 | 01:30:17   | US       | 192.168.119.173 |       0 |
```

| 1033 | NULL | yappiah | Information Technology | West-387 | 9 | yappiah | 2022-05-11 | 13:47:29 | MEX | 192.168.59.136 | 0 |

| 1032 | g773h303i639 | jrafael | Information Technology | Central-309 | 10 | jrafael | 2022-05-12 | 09:33:19 | CANADA | 192.168.228.221 | 0 |

| 1003 | d394e816f943 | sgilmore | Finance | South-153 | 11 | sgilmore | 2022-05-11 | 10:16:29 | CANADA | 192.168.140.81 | 0 |

| 1031 | f419g188h578 | dkot | Marketing | West-408 | 12 | dkot | 2022-05-08 | 09:11:34 | USA | 192.168.100.158 | 0 |

| 1027 | b806c503d354 | mrah | Marketing | West-246 | 13 | mrah | 2022-05-11 | 09:29:34 | USA | 192.168.246.135 | 0 |

| 1016 | q793r736s288 | sbaelish | Human Resources | North-229 | 14 | sbaelish | 2022-05-10 | 10:20:18 | US | 192.168.16.99 | 0 |

| 1043 | NULL | lyamamot | Information Technology | East-354 | 15 | lyamamot | 2022-05-09 | 17:17:26 | USA | 192.168.183.51 | 0 |

| 1019 | t815u205v470 | mcouliba | Information Technology | North-108 | 16 | mcouliba | 2022-05-11 | 06:44:22 | CAN | 192.168.172.189 | 0 |

| 1045 | t567u844v434 | pwashing | Finance | East-115 | 17 | pwashing | 2022-05-11 | 02:33:02 | USA | 192.168.81.89 | 0 |

| 1045 | t567u844v434 | pwashing | Finance | East-115 | 18 | pwashing | 2022-05-11 | 19:28:50 | US | 192.168.66.142 | 0 |

| 1025 | z381a365b233 | jhill | Sales | North-115 | 19 | jhill | 2022-05-12 | 13:09:04 | US | 192.168.142.245 | 0 |

| 1002 | c116d593e558 | tshah | Human Resources | North-434 | 20 | tshah | 2022-05-12 | 18:56:36 | MEXICO | 192.168.109.50 | 0 |

| 1024 | y976z753a267 | iuduike | Sales | South-215 | 21 | iuduike | 2022-05-11 | 17:50:00 | US | 192.168.131.147 | 0 |

| 1036 | k550l533m205 | rjensen | Marketing | Central-239 | 22 | rjensen | 2022-05-11 | 00:59:26 | MEX | 192.168.213.128 | 0 |

| 1033 | NULL | yappiah | Information Technology | West-387 | 23 | yappiah | 2022-05-10 | 18:11:53 | MEXICO | 192.168.200.48 | 0 |

| 1022 | w237x430y567 | arusso | Finance | West-465 | 24 | arusso | 2022-05-09 | 06:49:39 | MEXICO | 192.168.171.192 | 0 |

| 1016 | q793r736s288 | sbaelish | Human Resources | North-229 | 25 | sbaelish | 2022-05-09 | 07:04:02 | US | 192.168.33.137 | 0 |

| 1026 | a998b568c863 | apatel | Human Resources | West-320 | 26 | apatel | 2022-05-08 | 17:27:00 | CANADA | 192.168.123.105 | 0 |

| 1023 | x253y759z103 | aalonso | Information Technology | West-393 | 27 | aalonso | 2022-05-10 | 01:55:35 | MEX | 192.168.103.210 | 0 |

| 1028 | c603d749e374 | aestrada | Human Resources | West-121 | 28 | aestrada | 2022-05-09 | 19:28:12 | MEXICO | 192.168.27.57 | 0 |

| 1035 | j236k303l245 | bisles | Sales | South-171 | 29 | bisles | 2022-05-11 | 01:21:22 | US | 192.168.85.186 | 0 |

| 1033 | NULL | yappiah | Information Technology | West-387 | 30 | yappiah | 2022-05-09 | 03:22:22 | MEX | 192.168.124.48 | 0 |

| 1042 | q175r338s833 | acook | Human Resources | West-381 | 31 | acook | 2022-05-12 | 17:36:45 | CANADA | 192.168.58.232 | 0 |

| 1042 | q175r338s833 | acook | Human Resources | West-381 | 32 | acook | 2022-05-09 | 02:52:02 | CANADA | 192.168.142.239 | 0 |

| 1013 | n205o559p243 | zbernal | Information Technology | South-229 | 33 | zbernal | 2022-05-11 | 02:52:10 | US | 192.168.72.59 | 0 |

| 1011 | l748m120n401 | drosas | Sales | South-292 | 34 | drosas | 2022-05-11 | 21:02:04 | US | 192.168.45.93 | 0 |

| 1002 | c116d593e558 | tshah | Human Resources | North-434 | 35 | tshah | 2022-05-10 | 15:26:08 | MEX | 192.168.92.147 | 0 |

| 1014 | NULL | asundara | Information Technology | West-219 | 36 | asundara | 2022-05-08 | 09:00:42 | US | 192.168.78.151 | 0 |

| 1004 | e218f877g788 | eraab | Human Resources | South-127 | 37 | eraab | 2022-05-10 | 06:03:41 | CANADA | 192.168.152.148 | 0 |

| 1016 | q793r736s288 | sbaelish | Human Resources | North-229 | 38 | sbaelish | 2022-05-09 | 14:40:01 | USA | 192.168.60.42 | 0 |

1033	NULL	yappiah	Information Technology	West-387	39	yappiah	2022-05-09	07:56:40	MEXICO	192.168.57.115	0
1023	x253y759z103	aalonso	Information Technology	West-393	40	aalonso	2022-05-12	15:15:46	MEX	192.168.174.186	0
1026	a998b568c863	apatel	Human Resources	West-320	41	apatel	2022-05-10	17:39:42	CANADA	192.168.46.207	0
1041	p929q222r778	cgriffin	Sales	North-208	42	cgriffin	2022-05-09	23:04:05	US	192.168.4.157	0
1019	t815u205v470	mcouliba	Information Technology	North-108	43	mcouliba	2022-05-08	02:35:34	CANADA	192.168.16.208	0
1046	u429v921w138	daquino	Finance	West-280	44	daquino	2022-05-08	07:02:35	CANADA	192.168.168.144	0
1037	l693m585n528	dtanaka	Information Technology	West-468	45	dtanaka	2022-05-11	10:28:54	US	192.168.223.157	0
1004	e218f877g788	eraab	Human Resources	South-127	46	eraab	2022-05-11	11:29:27	CAN	192.168.24.12	0
1031	f419g188h578	dkot	Marketing	West-408	47	dkot	2022-05-08	05:06:45	US	192.168.233.24	0
1014	NULL	asundara	Information Technology	West-219	48	asundara	2022-05-11	03:18:45	USA	192.168.72.10	0
1014	NULL	asundara	Information Technology	West-219	49	asundara	2022-05-08	14:00:01	US	192.168.173.213	0
1017	r550s824t230	jclark	Finance	North-188	50	jclark	2022-05-10	10:48:02	CANADA	192.168.174.117	0
1032	g773h303i639	jrafael	Information Technology	Central-309	51	jrafael	2022-05-10	22:40:01	CANADA	192.168.148.115	0
1039	n253o917p623	cjackson	Sales	East-378	52	cjackson	2022-05-10	22:07:07	CAN	192.168.58.57	0
1012	m756n668o146	nmason	Information Technology	North-160	53	nmason	2022-05-08	11:51:38	CAN	192.168.133.188	0

1049	NULL	jreckley	Finance	Central-295	54	jreckley	2022-05-10	19:31:19	MEXICO	192.168.167.152	0
1010	k242l212m542	jlansky	Finance	South-109	55	jlansky	2022-05-11	05:15:34	US	192.168.6.170	0
1042	q175r338s833	acook	Human Resources	West-381	56	acook	2022-05-08	04:56:30	CAN	192.168.209.130	0
1014	NULL	asundara	Information Technology	West-219	57	asundara	2022-05-12	21:13:02	US	192.168.211.201	0
1029	d336e475f676	ivelasco	Finance	East-156	58	ivelasco	2022-05-09	17:20:54	CAN	192.168.57.162	0
1036	k550l533m205	rjensen	Marketing	Central-239	59	rjensen	2022-05-12	04:52:08	MEX	192.168.54.140	0
1042	q175r338s833	acook	Human Resources	West-381	60	acook	2022-05-11	21:46:00	CAN	192.168.54.45	0
1037	l693m585n528	dtanaka	Information Technology	West-468	61	dtanaka	2022-05-09	09:45:18	USA	192.168.98.221	0
1008	i858j583k571	abernard	Finance	South-170	62	abernard	2022-05-10	10:19:57	MEXICO	192.168.156.224	0
1048	w167x592y375	tmitchel	Finance	South-288	63	tmitchel	2022-05-11	14:13:41	MEXICO	192.168.110.131	0
1026	a998b568c863	apatel	Human Resources	West-320	64	apatel	2022-05-10	22:00:09	CANADA	192.168.172.71	0
1023	x253y759z103	aalonso	Information Technology	West-393	65	aalonso	2022-05-09	23:42:12	MEX	192.168.52.37	0
1028	c603d749e374	aestrada	Human Resources	West-121	66	aestrada	2022-05-08	21:58:32	MEX	192.168.67.223	0
1008	i858j583k571	abernard	Finance	South-170	67	abernard	2022-05-09	11:53:41	MEX	192.168.118.29	0
1027	b806c503d354	mrah	Marketing	West-246	68	mrah	2022-05-08	17:16:13	US	192.168.42.248	0

1007	h174i497j413	wjaffrey	Finance	North-406	69	wjaffrey	2022-05-11	19:55:15	USA	192.168.100.17	0
1048	w167x592y375	tmitchel	Finance	South-288	70	tmitchel	2022-05-09	10:55:17	MEXICO	192.168.87.199	0
1019	t815u205v470	mcouliba	Information Technology	North-108	71	mcouliba	2022-05-09	06:57:42	CAN	192.168.55.169	0
1006	g329h357i597	alevitsk	Information Technology	East-320	72	alevitsk	2022-05-08	12:09:10	CANADA	192.168.139.176	0
1013	n205o559p243	zbernal	Information Technology	South-229	73	zbernal	2022-05-10	17:46:45	USA	192.168.80.46	0
1012	m756n668o146	nmason	Information Technology	North-160	74	nmason	2022-05-11	15:55:48	CAN	192.168.162.2	0
1013	n205o559p243	zbernal	Information Technology	South-229	75	zbernal	2022-05-12	04:14:35	US	192.168.188.63	0
1001	b239c825d303	bmoreno	Marketing	Central-276	76	bmoreno	2022-05-10	10:53:55	CAN	192.168.61.200	0
1007	h174i497j413	wjaffrey	Finance	North-406	77	wjaffrey	2022-05-12	08:37:59	US	192.168.106.183	0
1021	v200w121x977	smartell	Information Technology	South-138	78	smartell	2022-05-10	05:55:53	MEX	192.168.41.88	0
1008	i858j583k571	abernard	Finance	South-170	79	abernard	2022-05-09	11:41:15	MEX	192.168.158.170	0
1039	n253o917p623	cjackson	Sales	East-378	80	cjackson	2022-05-08	02:18:10	CANADA	192.168.33.140	0
1023	x253y759z103	aalonso	Information Technology	West-393	81	aalonso	2022-05-11	12:50:38	MEX	192.168.152.43	0
1008	i858j583k571	abernard	Finance	South-170	82	abernard	2022-05-12	23:38:46	MEX	192.168.234.49	0
1009	NULL	lrodriqu	Sales	South-134	83	lrodriqu	2022-05-08	08:10:23	USA	192.168.67.69	0

1032	g773h303i639	jrafael	Information Technology	Central-309	84	jrafael	2022-05-11	09:26:17	CAN	192.168.243.203	0
1040	o783p832q294	dtarly	Human Resources	East-237	85	dtarly	2022-05-11	17:35:28	MEX	192.168.254.75	0
1037	l693m585n528	dtanaka	Information Technology	West-468	86	dtanaka	2022-05-10	10:22:20	USA	192.168.197.135	0
1026	a998b568c863	apatel	Human Resources	West-320	87	apatel	2022-05-08	22:38:31	CANADA	192.168.132.153	0
1028	c603d749e374	aestrada	Human Resources	West-121	88	aestrada	2022-05-12	11:21:50	MEXICO	192.168.153.77	0
1031	f419g188h578	dkot	Marketing	West-408	89	dkot	2022-05-12	10:52:00	USA	192.168.128.75	0
1005	f551g340h864	gesparza	Human Resources	South-366	90	gesparza	2022-05-09	00:49:05	CANADA	192.168.87.201	0
1025	z381a365b233	jhill	Sales	North-115	91	jhill	2022-05-11	17:46:47	US	192.168.172.74	0
1045	t567u844v434	pwashing	Finance	East-115	92	pwashing	2022-05-08	00:36:12	US	192.168.247.219	0
1049	NULL	jreckley	Finance	Central-295	93	jreckley	2022-05-12	04:31:20	MEX	192.168.108.24	0
1044	s429t157u159	tbarnes	Finance	West-415	94	tbarnes	2022-05-10	03:37:10	MEX	192.168.74.202	0
1040	o783p832q294	dtarly	Human Resources	East-237	95	dtarly	2022-05-12	11:23:42	MEX	192.168.203.198	0
1029	d336e475f676	ivelasco	Finance	East-156	96	ivelasco	2022-05-09	22:36:36	CAN	192.168.84.194	0
1049	NULL	jreckley	Finance	Central-295	97	jreckley	2022-05-09	02:49:23	MEXICO	192.168.32.231	0
1005	f551g340h864	gesparza	Human Resources	South-366	98	gesparza	2022-05-11	06:30:14	CANADA	192.168.148.80	0

1019	t815u205v470	mcouliba	Information Technology	North-108	99	mcouliba	2022-05-12	11:54:14	CANADA	192.168.218.160	0
1048	w167x592y375	tmitchel	Finance	South-288	100	tmitchel	2022-05-12	16:02:03	MEXICO	192.168.97.225	0
1016	q793r736s288	sbaelish	Human Resources	North-229	101	sbaelish	2022-05-08	12:01:22	US	192.168.145.158	0
1049	NULL	jreckley	Finance	Central-295	102	jreckley	2022-05-09	16:51:44	MEX	192.168.108.13	0
1025	z381a365b233	jhill	Sales	North-115	103	jhill	2022-05-11	09:10:54	US	192.168.60.153	0
1014	NULL	asundara	Information Technology	West-219	104	asundara	2022-05-11	18:38:07	US	192.168.96.200	0
1039	n253o917p623	cjackson	Sales	East-378	105	cjackson	2022-05-12	19:36:42	CAN	192.168.247.153	0
1048	w167x592y375	tmitchel	Finance	South-288	106	tmitchel	2022-05-12	06:15:41	MEXICO	192.168.3.252	0
1035	j236k303l245	bisles	Sales	South-171	107	bisles	2022-05-12	20:25:57	USA	192.168.116.187	0
1046	u429v921w138	daquino	Finance	West-280	108	daquino	2022-05-09	21:30:48	CANADA	192.168.15.110	0
1019	t815u205v470	mcouliba	Information Technology	North-108	109	mcouliba	2022-05-10	04:43:15	CANADA	192.168.39.246	0
1030	e391f189g913	mabadi	Marketing	West-375	110	mabadi	2022-05-09	00:01:54	USA	192.168.90.124	0
1028	c603d749e374	aestrada	Human Resources	West-121	111	aestrada	2022-05-10	22:00:26	MEXICO	192.168.76.27	0
1036	k550l533m205	rjensen	Marketing	Central-239	112	rjensen	2022-05-09	09:22:05	MEX	192.168.69.116	0
1005	f551g340h864	gesparza	Human Resources	South-366	113	gesparza	2022-05-10	00:40:00	CAN	192.168.64.133	0

| 1021 | v200w121x977 | smartell | Information Technology | South-138 | 114 | smartell | 2022-05-10 | 10:51:22 | MEXICO | 192.168.191.124 | 0 |

| 1029 | d336e475f676 | ivelasco | Finance | East-156 | 115 | ivelasco | 2022-05-10 | 23:06:01 | CAN | 192.168.154.1 | 0 |

| 1048 | w167x592y375 | tmitchel | Finance | South-288 | 116 | tmitchel | 2022-05-10 | 20:33:27 | MEXICO | 192.168.119.26 | 0 |

| 1034 | i679j565k940 | bsand | Human Resources | East-484 | 117 | bsand | 2022-05-08 | 00:19:11 | USA | 192.168.197.187 | 0 |

| 1021 | v200w121x977 | smartell | Information Technology | South-138 | 118 | smartell | 2022-05-12 | 23:21:31 | MEXICO | 192.168.173.196 | 0 |

| 1048 | w167x592y375 | tmitchel | Finance | South-288 | 119 | tmitchel | 2022-05-11 | 23:07:13 | MEXICO | 192.168.110.175 | 0 |

| 1048 | w167x592y375 | tmitchel | Finance | South-288 | 120 | tmitchel | 2022-05-09 | 02:58:17 | MEXICO | 192.168.134.62 | 0 |

| 1038 | m873n636o225 | btang | Human Resources | Central-260 | 121 | btang | 2022-05-10 | 22:00:36 | US | 192.168.80.143 | 0 |

| 1033 | NULL | yappiah | Information Technology | West-387 | 122 | yappiah | 2022-05-11 | 08:27:25 | MEX | 192.168.50.45 | 0 |

| 1001 | b239c825d303 | bmoreno | Marketing | Central-276 | 123 | bmoreno | 2022-05-10 | 04:43:30 | CANADA | 192.168.98.2 | 0 |

| 1014 | NULL | asundara | Information Technology | West-219 | 124 | asundara | 2022-05-12 | 10:51:21 | USA | 192.168.136.29 | 0 |

| 1035 | j236k303l245 | bisles | Sales | South-171 | 125 | bisles | 2022-05-11 | 08:36:19 | US | 192.168.74.9 | 0 |

| 1032 | g773h303i639 | jrafael | Information Technology | Central-309 | 126 | jrafael | 2022-05-12 | 18:47:52 | CAN | 192.168.22.16 | 0 |

| 1018 | s310t540u653 | abellmas | Finance | North-403 | 127 | abellmas | 2022-05-09 | 21:20:51 | CANADA | 192.168.70.122 | 0 |

| 1017 | r550s824t230 | jclark | Finance | North-188 | 128 | jclark | 2022-05-09 | 10:45:59 | CANADA | 192.168.122.169 | 0 |

1011	l748m120n401	drosas	Sales	South-292	129	drosas	2022-05-12	15:39:40	USA	192.168.152.200	0
1027	b806c503d354	mrah	Marketing	West-246	130	mrah	2022-05-11	02:54:21	USA	192.168.102.147	0
1035	j236k303l245	bisles	Sales	South-171	131	bisles	2022-05-09	20:03:55	US	192.168.113.171	0
1036	k550l533m205	rjensen	Marketing	Central-239	132	rjensen	2022-05-12	23:26:03	MEX	192.168.9.166	0
1014	NULL	asundara	Information Technology	West-219	133	asundara	2022-05-12	05:57:04	USA	192.168.6.9	0
1024	y976z753a267	iuduike	Sales	South-215	134	iuduike	2022-05-09	06:46:40	USA	192.168.22.115	0
1034	i679j565k940	bsand	Human Resources	East-484	135	bsand	2022-05-09	14:06:33	US	192.168.91.238	0
1030	e391f189g913	mabadi	Marketing	West-375	136	mabadi	2022-05-10	06:56:44	US	192.168.214.234	0
1032	g773h303i639	jrafael	Information Technology	Central-309	137	jrafael	2022-05-12	02:42:37	CAN	192.168.186.176	0
1048	w167x592y375	tmitchel	Finance	South-288	138	tmitchel	2022-05-10	12:38:33	MEXICO	192.168.216.96	0
1026	a998b568c863	apatel	Human Resources	West-320	139	apatel	2022-05-11	01:54:36	CAN	192.168.95.222	0
1038	m873n636o225	btang	Human Resources	Central-260	140	btang	2022-05-10	13:17:29	US	192.168.249.111	0
1038	m873n636o225	btang	Human Resources	Central-260	141	btang	2022-05-12	10:12:03	USA	192.168.82.139	0
1005	f551g340h864	gesparza	Human Resources	South-366	142	gesparza	2022-05-11	06:31:14	CANADA	192.168.117.56	0
1025	z381a365b233	jhill	Sales	North-115	143	jhill	2022-05-11	00:30:22	USA	192.168.189.19	0

| 1046 | u429v921w138 | daquino | Finance | West-280 | 144 | daquino | 2022-05-09 | 11:09:32 | CANADA | 192.168.139.9 | 0 |

| 1029 | d336e475f676 | ivelasco | Finance | East-156 | 145 | ivelasco | 2022-05-08 | 09:06:02 | CANADA | 192.168.39.196 | 0 |

| 1012 | m756n668o146 | nmason | Information Technology | North-160 | 146 | nmason | 2022-05-10 | 02:25:55 | CANADA | 192.168.37.147 | 0 |

| 1033 | NULL | yappiah | Information Technology | West-387 | 147 | yappiah | 2022-05-08 | 06:04:34 | MEX | 192.168.65.245 | 0 |

| 1046 | u429v921w138 | daquino | Finance | West-280 | 148 | daquino | 2022-05-08 | 06:15:55 | CANADA | 192.168.135.6 | 0 |

| 1010 | k242l212m542 | jlansky | Finance | South-109 | 149 | jlansky | 2022-05-11 | 01:07:11 | USA | 192.168.238.42 | 0 |

| 1012 | m756n668o146 | nmason | Information Technology | North-160 | 150 | nmason | 2022-05-08 | 14:40:02 | CAN | 192.168.204.124 | 0 |

| 1030 | e391f189g913 | mabadi | Marketing | West-375 | 151 | mabadi | 2022-05-09 | 16:29:46 | USA | 192.168.30.225 | 0 |

| 1030 | e391f189g913 | mabadi | Marketing | West-375 | 152 | mabadi | 2022-05-12 | 10:24:43 | USA | 192.168.96.244 | 0 |

| 1021 | v200w121x977 | smartell | Information Technology | South-138 | 153 | smartell | 2022-05-12 | 13:32:52 | MEXICO | 192.168.218.219 | 0 |

| 1010 | k242l212m542 | jlansky | Finance | South-109 | 154 | jlansky | 2022-05-12 | 10:57:35 | US | 192.168.23.63 | 0 |

| 1041 | p929q222r778 | cgriffin | Sales | North-208 | 155 | cgriffin | 2022-05-12 | 22:18:42 | USA | 192.168.236.176 | 0 |

| 1038 | m873n636o225 | btang | Human Resources | Central-260 | 156 | btang | 2022-05-11 | 17:08:51 | USA | 192.168.243.95 | 0 |

| 1048 | w167x592y375 | tmitchel | Finance | South-288 | 157 | tmitchel | 2022-05-12 | 14:14:54 | MEXICO | 192.168.179.119 | 0 |

| 1021 | v200w121x977 | smartell | Information Technology | South-138 | 158 | smartell | 2022-05-09 | 19:30:32 | MEXICO | 192.168.190.178 | 0 |

1024	y976z753a267	iuduike	Sales	South-215	159	iuduike	2022-05-12	16:59:50	USA	192.168.220.115	0
1017	r550s824t230	jclark	Finance	North-188	160	jclark	2022-05-10	20:49:00	CANADA	192.168.214.49	0
1018	s310t540u653	abellmas	Finance	North-403	161	abellmas	2022-05-09	13:25:50	CAN	192.168.180.205	0
1033	NULL	yappiah	Information Technology	West-387	162	yappiah	2022-05-09	04:51:22	MEXICO	192.168.162.100	0
1048	w167x592y375	tmitchel	Finance	South-288	163	tmitchel	2022-05-08	09:21:16	MEX	192.168.119.29	0
1017	r550s824t230	jclark	Finance	North-188	164	jclark	2022-05-12	21:15:52	CAN	192.168.18.34	0
1049	NULL	jreckley	Finance	Central-295	165	jreckley	2022-05-08	15:28:43	MEXICO	192.168.34.193	0
1048	w167x592y375	tmitchel	Finance	South-288	166	tmitchel	2022-05-10	05:45:16	MEX	192.168.80.129	0
1017	r550s824t230	jclark	Finance	North-188	167	jclark	2022-05-12	15:47:45	CAN	192.168.146.51	0
1010	k242l212m542	jlansky	Finance	South-109	168	jlansky	2022-05-08	13:25:42	USA	192.168.210.94	0
1006	g329h357i597	alevitsk	Information Technology	East-320	169	alevitsk	2022-05-08	08:10:43	CANADA	192.168.210.228	0
1016	q793r736s288	sbaelish	Human Resources	North-229	170	sbaelish	2022-05-09	16:43:18	USA	192.168.65.113	0
1011	l748m120n401	drosas	Sales	South-292	171	drosas	2022-05-10	16:32:55	USA	192.168.92.218	0
1030	e391f189g913	mabadi	Marketing	West-375	172	mabadi	2022-05-08	08:06:50	US	192.168.180.41	0
1014	NULL	asundara	Information Technology	West-219	173	asundara	2022-05-12	23:17:52	US	192.168.58.217	0

| 1043 | NULL | lyamamot | Information Technology | East-354 | 174 | lyamamot | 2022-05-10 | 12:26:27 | US | 192.168.228.122 | 0 |

| 1025 | z381a365b233 | jhill | Sales | North-115 | 175 | jhill | 2022-05-10 | 00:17:09 | USA | 192.168.130.218 | 0 |

| 1047 | v109w587x644 | cward | Finance | West-373 | 176 | cward | 2022-05-11 | 12:00:02 | MEX | 192.168.133.88 | 0 |

| 1007 | h174i497j413 | wjaffrey | Finance | North-406 | 177 | wjaffrey | 2022-05-11 | 00:15:55 | USA | 192.168.144.165 | 0 |

| 1003 | d394e816f943 | sgilmore | Finance | South-153 | 178 | sgilmore | 2022-05-08 | 12:27:22 | CAN | 192.168.52.216 | 0 |

| 1017 | r550s824t230 | jclark | Finance | North-188 | 179 | jclark | 2022-05-12 | 04:08:17 | CAN | 192.168.232.93 | 0 |

| 1048 | w167x592y375 | tmitchel | Finance | South-288 | 180 | tmitchel | 2022-05-12 | 14:53:21 | MEX | 192.168.190.202 | 0 |

| 1018 | s310t540u653 | abellmas | Finance | North-403 | 181 | abellmas | 2022-05-10 | 13:37:05 | CAN | 192.168.60.111 | 0 |

| 1043 | NULL | lyamamot | Information Technology | East-354 | 182 | lyamamot | 2022-05-10 | 06:01:31 | USA | 192.168.106.52 | 0 |

| 1012 | m756n668o146 | nmason | Information Technology | North-160 | 183 | nmason | 2022-05-11 | 05:29:36 | CANADA | 192.168.137.147 | 0 |

| 1006 | g329h357i597 | alevitsk | Information Technology | East-320 | 184 | alevitsk | 2022-05-08 | 03:09:48 | CAN | 192.168.33.70 | 0 |

| 1015 | p611q262r945 | jsoto | Finance | North-271 | 185 | jsoto | 2022-05-10 | 13:34:58 | USA | 192.168.151.91 | 0 |

| 1035 | j236k303l245 | bisles | Sales | South-171 | 186 | bisles | 2022-05-09 | 04:29:17 | USA | 192.168.40.72 | 0 |

| 1022 | w237x430y567 | arusso | Finance | West-465 | 187 | arusso | 2022-05-09 | 00:36:26 | MEX | 192.168.77.137 | 0 |

| 1015 | p611q262r945 | jsoto | Finance | North-271 | 188 | jsoto | 2022-05-11 | 00:39:09 | USA | 192.168.21.88 | 0 |

| 1012 | m756n668o146 | nmason | Information Technology | North-160 | 189 | nmason | 2022-05-08 | 05:37:24 | CANADA | 192.168.168.117 | 0 |

| 1015 | p611q262r945 | jsoto | Finance | North-271 | 190 | jsoto | 2022-05-09 | 05:09:21 | USA | 192.168.25.60 | 0 |

| 1039 | n253o917p623 | cjackson | Sales | East-378 | 191 | cjackson | 2022-05-08 | 06:46:07 | CANADA | 192.168.7.187 | 0 |

| 1035 | j236k303l245 | bisles | Sales | South-171 | 192 | bisles | 2022-05-10 | 08:32:03 | USA | 192.168.201.40 | 0 |

| 1009 | NULL | lrodriqu | Sales | South-134 | 193 | lrodriqu | 2022-05-08 | 07:11:29 | US | 192.168.125.240 | 0 |

| 1017 | r550s824t230 | jclark | Finance | North-188 | 194 | jclark | 2022-05-12 | 14:11:04 | CAN | 192.168.197.247 | 0 |

| 1006 | g329h357i597 | alevitsk | Information Technology | East-320 | 195 | alevitsk | 2022-05-11 | 06:59:13 | CANADA | 192.168.236.78 | 0 |

| 1042 | q175r338s833 | acook | Human Resources | West-381 | 196 | acook | 2022-05-10 | 09:56:48 | CAN | 192.168.52.90 | 0 |

| 1015 | p611q262r945 | jsoto | Finance | North-271 | 197 | jsoto | 2022-05-08 | 09:05:09 | US | 192.168.36.21 | 0 |

| 1033 | NULL | yappiah | Information Technology | West-387 | 198 | yappiah | 2022-05-12 | 10:37:22 | MEXICO | 192.168.103.106 | 0 |

| 1033 | NULL | yappiah | Information Technology | West-387 | 199 | yappiah | 2022-05-11 | 19:34:48 | MEXICO | 192.168.44.232 | 0 |

| 1017 | r550s824t230 | jclark | Finance | North-188 | 200 | jclark | 2022-05-12 | 01:11:45 | CANADA | 192.168.91.103 | 0 |

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