In [ ]:
```
###          sql: limit  python: df.head()
```

In [ ]:
```

```

In [200…
```
# CREATE TABLE products (
#     CUSTOMER_KEY int,
#     PROD_TYPE nvarchar(50),
#     BALANCE int
# )



# INSERT INTO products (CUSTOMER_KEY, PROD_TYPE, BALANCE)

# VALUES
# (1001, 'ISA', 118414.38),
# (1001, 'TFSA', 20853.07),
# (1002, 'ISA', 3.63),
# (1003, 'ISA', 4.78),
# (1004, 'THRIVE', 4.83),
# (1005, 'ISA', 0.15),
# (1005, 'TFSA', 68.4),
# (1006, 'ISA', 0.01),
# (1007, 'TFSA', 5280.27),
# (1008, 'ISA', 96149.36),
# (1009, 'ISA', 185752.15),
# (1009, 'THRIVE', 20869.02),
# (1010, 'TFSA', 23.63),
# (1010, 'THRIVE', 6.47)
```

In [ ]:
```
# CREATE TABLE customers (
#       CUSTOMER_KEY int,
#       CLIENT_DATE DATE,
#       AGE int,
#       REGION nvarchar(50),
#       NUM_OF_CONTACT int ,
#       NUM_OF_TXN int ,
#       EmailPermission nvarchar(50),
#       MailPermission nvarchar(50)
# )


# INSERT INTO customers (CUSTOMER_KEY, CLIENT_DATE, AGE, REGION, NUM_OF_CONTACT

# VALUES
# (1001, '08-Apr-99', 87, 'Ontario', 10, '13', 'Y', 'N'),
# (1001, '08-Apr-99', 87, 'Ontario', 10, '13', 'Y', 'Y'),
# (1002, '29-Feb-00', 83, 'Ontario', 0, '.', 'Y', 'N'),
# (1003, '04-Nov-98', 44, 'Ontario', 0, '.', 'Y', 'N'),
# (1004, '16-Sep-98', 58, 'Alberta', 0, '.', 'Y', 'N'),
# (1005, '04-Oct-00', 50, 'BC', 0, '.', 'Y', 'N'),
# (1006, '01-May-00', 72, 'Ontario', 0, '.', 'Y', 'N'),
# (1007, '14-Jul-00', 48, 'Ontario', 0, '.', 'Y', 'N'),
# (1008, '13-Oct-00', 52, 'BC', 2, 3, 'Y', 'N'),
# (1009, '25-Sep-01', 67, 'Ontario', 9, 26, 'Y', 'N'),
# (1010, '24-Mar-00',   63, 'Ontario', 0, '.', 'N', 'N')
```

In [ ]:
```
# Remove duplication in customers Table, keep the last one
CREATE TABLE Customer_new AS
SELECT *, row_number() over(partition by CUSTOMER_KEY Order BY row DESC) AS ran
FROM(
SELECT row_number() OVER() AS row , *
FROM Customers
)

# CREATE TABLE Customer_2 AS
# SELECT * FROM Customer_new
# WHERE rank == 1


# ALTER TABLE Customer_2
#     DROP row
# ALTER TABLE Customer_2
#     DROP rank

# DROP table Customer_new
```

In [ ]:
```
# Count_of_Products
SELECT CUSTOMER_KEY,
    COUNT(CUSTOMER_KEY) AS Count_of_Products
FROM(
    SELECT *
    FROM Customers AS c
    LEFT JOIN Products AS p
    ON c.CUSTOMER_KEY = p.CUSTOMER_KEY)
GROUP BY CUSTOMER_KEY

# Count_of_Region
SELECT Region,
    COUNT(Region) AS Count_of_Region
FROM Customers AS c
GROUP BY Region

# Count_of_AGE
# SELECT AGE_category,
#     COUNT(AGE_category) AS Count_of_AGE
# FROM(
#     SELECT *,
#     CASE WHEN AGE <30 AND AGE >= 0 THEN 'AGE < 30'
#     WHEN AGE <60 AND AGE >= 30 THEN '30 < AGE < 60'
#     ELSE 'AGE >= 60' END AS 'AGE_category'
#     FROM Customers AS c)
# GROUP BY AGE_category


# Count_of_PROD_TYPE
SELECT PROD_TYPE,
    COUNT(PROD_TYPE) AS Count_of_PROD_TYPE
FROM(
    SELECT *
    FROM Customers AS c
    LEFT JOIN Products AS p
    ON c.CUSTOMER_KEY = p.CUSTOMER_KEY)
GROUP BY PROD_TYPE

# COUNT(NUM_OF_CONTACT) by REGION
```

```
SELECT REGION,
    NUM_OF_CONTACT,
    COUNT(NUM_OF_CONTACT)
FROM Customers
GROUP BY REGION, NUM_OF_CONTACT

# COUNT(NUM_OF_CONTACT) by REGION, AGE_category
# SELECT REGION,
#     AGE_category,
#     NUM_OF_CONTACT,
#     COUNT(NUM_OF_CONTACT)
# FROM(
#     SELECT *,
#         CASE WHEN AGE <30 AND AGE >= 0 THEN 'AGE < 30'
#         WHEN AGE <60 AND AGE >= 30 THEN '30 < AGE < 60'
#         ELSE 'AGE >= 60' END AS 'AGE_category'
# FROM Customers AS c)
# GROUP BY REGION, AGE_category, NUM_OF_CONTACT

# Balance
SELECT CUSTOMER_KEY,
    SUM(BALANCE) AS Balance
FROM(
    SELECT * FROM Customers AS c
    LEFT JOIN Products AS p
    ON c.CUSTOMER_KEY = p.CUSTOMER_KEY)
GROUP BY CUSTOMER_KEY
```

In [ ]:

In [ ]:

```
#2.1. Identify potential cross-sell target (customers who do not have Chequing
```

In [ ]:

```
%%sql
SELECT *
FROM new
WHERE CUSTOMER_KEY NOT IN (
SELECT CUSTOMER_KEY
FROM new
WHERE PROD_TYPE == 'THRIVE' )
```

In [163…

```
import pandas as pd
import sqlite3
data = pd.read_excel('Products.xls')
cnn = sqlite3.connect('juypter_sql_tutorial.db')
#data.to_sql('df', cnn)
%load_ext sql
%sql sqlite:///juypter_sql_tutorial.db
```

```
The sql extension is already loaded. To reload it, use:
  %reload_ext sql
```

In [64]:

```
%%sql
CREATE TABLE new AS
SELECT *,
    CASE WHEN PROD_TYPE =='THRIVE' THEN '1'
    ELSE '0' END AS 'THRIVE_1_OTHERS_0'
FROM products AS p
LEFT JOIN customers AS c
ON p.CUSTOMER_KEY = c.CUSTOMER_KEY
```

```
 * sqlite:///juypter_sql_tutorial.db
Done.
```

Out[64]:

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
0	1001	ISA	118414.38	0
1	1001	TFSA	20853.07	0
2	1002	ISA	3.63	0
3	1003	ISA	4.78	0
4	1004	ISA	4.83	0
5	1005	ISA	0.15	0
6	1005	TFSA	68.4	0
7	1006	ISA	0.01	0
8	1007	TFSA	5280.27	0
9	1008	ISA	96149.36	0
10	1009	ISA	185752.15	0
11	1009	TFSA	20869.02	0
12	1010	ISA	23.63	0
13	1010	RSP_DEP	6.47	0
14	1011	ISA	7232.07	0
15	1012	ISA	3.36	0
16	1013	ISA	13795.91	0
17	1013	RSP_DEP	38756.43	0
18	1013	TFSA	20856.66	0
19	1013	THRIVE	100.22	1
20	1014	TFSA	3863.42	0
21	1015	ISA	2457.35	0
22	1016	ISA	7488.57	0
23	1017	ISA	1026.58	0
24	1018	ISA	24.18	0
25	1019	ISA	64511.62	0
26	1019	MTG	68768.35	0
27	1020	ISA	27652.51	0
28	1020	TFSA	20644.4	0
29	1021	ISA	229.99	0
30	1022	ISA	25131.02	0
31	1023	ISA	660.76	0
32	1023	THRIVE	2166.29	1
33	1024	ISA	3992.63	0
34	1025	ISA	22223.9	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
35	1025	TFSA	8194.35	0
36	1026	ISA	8816.54	0
37	1027	ISA	17941.07	0
38	1027	MF	5101.0	0
39	1027	RSP_DEP	1.25	0
40	1027	TFSA	16871.63	0
41	1028	ISA	2781.09	0
42	1029	ISA	177782.09	0
43	1029	RSP_DEP	5725.32	0
44	1029	TFSA	20644.4	0
45	1030	ISA	975.44	0
46	1030	TFSA	0.63	0
47	1031	ISA	3412.88	0
48	1031	TFSA	11.55	0
49	1032	ISA	2.67	0
50	1033	GIC	300000.0	0
51	1033	ISA	31168.16	0
52	1033	TFSA	15502.69	0
53	1034	GIC	11662.5	0
54	1034	ISA	29711.66	0
55	1035	ISA	5.82	0
56	1035	TFSA	16.84	0
57	1036	ISA	5078.57	0
58	1037	ISA	180936.89	0
59	1038	ISA	20799.13	0
60	1038	TFSA	20854.36	0
61	1039	ISA	0.11	0
62	1039	TFSA	0.89	0
63	1039	THRIVE	0.01	1
64	1040	ISA	1834.62	0
65	1040	TFSA	2608.17	0
66	1041	ISA	16249.25	0
67	1042	ISA	27109.5	0
68	1043	ISA	0.06	0
69	1044	ISA	8.39	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
70	1045	GIC	545.68	0
71	1045	ISA	413.2	0
72	1045	RSP_DEP	3811.19	0
73	1045	TFSA	425.74	0
74	1045	THRIVE	377.4	1
75	1046	ISA	0.0	0
76	1046	TFSA	5331.09	0
77	1047	GIC	78198.36	0
78	1047	ISA	8567.77	0
79	1047	RSP_DEP	45334.0	0
80	1047	TFSA	10370.46	0
81	1048	ISA	324.32	0
82	1049	ISA	56876.68	0
83	1049	TFSA	15626.85	0
84	1050	ISA	2.15	0
85	1051	ISA	43514.45	0
86	1052	ISA	24494.3	0
87	1053	ISA	44701.8	0
88	1053	MF	5137.29	0
89	1053	TFSA	20771.68	0
90	1055	ISA	31287.02	0
91	1055	TFSA	15455.44	0
92	1056	ISA	2.46	0
93	1057	TFSA	13776.06	0
94	1058	ISA	2.64	0
95	1059	ISA	454.02	0
96	1060	GIC	49989.73	0
97	1060	ISA	15434.47	0
98	1060	TFSA	2596.42	0
99	1061	ISA	1260.02	0
100	1061	MF	1911.05	0
101	1061	RSP_DEP	245.15	0
102	1061	TFSA	301.73	0
103	1062	RSP_DEP	8496.59	0
104	1063	ISA	343.55	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
105	1063	TFSA	2744.14	0
106	1063	THRIVE	45.02	1
107	1064	ISA	0.08	0
108	1064	TFSA	0.0	0
109	1065	GIC	74184.54	0
110	1065	ISA	91222.66	0
111	1065	MF	16076.89	0
112	1065	TFSA	5061.81	0
113	1066	ISA	7592.98	0
114	1066	TFSA	16.12	0
115	1067	ISA	14242.55	0
116	1067	TFSA	20442.8	0
117	1068	ISA	60.52	0
118	1068	MTG	183525.67	0
119	1069	ISA	11.61	0
120	1070	ISA	0.11	0
121	1071	ISA	3653.92	0
122	1072	GIC	60957.82	0
123	1072	ISA	32016.62	0
124	1073	TFSA	20306.41	0
125	1074	ISA	105296.46	0
126	1075	ISA	6395.46	0
127	1075	RSP_DEP	0.0	0
128	1075	TFSA	0.0	0
129	1077	ISA	0.0	0
130	1077	MF	4887.58	0
131	1077	RSP_DEP	57025.92	0
132	1077	TFSA	20855.66	0
133	1078	GIC	1193.55	0
134	1078	ISA	39.39	0
135	1078	TFSA	6750.86	0
136	1079	ISA	4228.21	0
137	1080	MF	8151.91	0
138	1080	RSP_DEP	20391.23	0
139	1080	TFSA	395.13	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
140	1081	GIC	122845.59	0
141	1081	ISA	79236.31	0
142	1081	TFSA	31504.51	0
143	1082	ISA	47849.86	0
144	1082	RSP_DEP	11677.54	0
145	1082	TFSA	20701.77	0
146	1083	ISA	39.24	0
147	1084	ISA	1769.77	0
148	1085	ISA	1583.11	0
149	1085	RSP_DEP	1273.02	0
150	1085	TFSA	0.0	0
151	1086	ISA	29869.58	0
152	1087	ISA	103.64	0
153	1088	ISA	64.84	0
154	1089	ISA	323823.59	0
155	1089	RSP_DEP	4743.96	0
156	1089	TFSA	20963.97	0
157	1090	GIC	27348.65	0
158	1090	ISA	54939.75	0
159	1090	TFSA	20800.94	0
160	1091	ISA	1.07	0
161	1091	RSP_DEP	14.86	0
162	1091	TFSA	0.02	0
163	1091	THRIVE	2.57	1
164	1092	ISA	882.75	0
165	1093	ISA	400.49	0
166	1094	ISA	697.58	0
167	1094	TFSA	58.27	0
168	1095	ISA	5435.81	0
169	1095	MF	556.35	0
170	1095	TFSA	15530.92	0
171	1096	ISA	2436.18	0
172	1097	ISA	198.09	0
173	1098	ISA	0.11	0
174	1098	MF	16582.84	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
175	1098	RSP_DEP	21210.65	0
176	1098	TFSA	0.02	0
177	1099	ISA	211.6	0
178	1099	TFSA	20749.12	0
179	1100	ISA	167.71	0
180	1101	ISA	9.06	0
181	1102	ISA	5966.25	0
182	1102	RSP_DEP	17529.27	0
183	1102	TFSA	1018.29	0
184	1102	THRIVE	2914.84	1
185	1103	ISA	208428.39	0
186	1103	TFSA	20659.62	0
187	1104	ISA	1793.95	0
188	1104	RSP_DEP	1514.32	0
189	1105	ISA	0.58	0
190	1106	ISA	43.53	0
191	1106	RSP_DEP	11.26	0
192	1106	THRIVE	10.07	1
193	1107	TFSA	10399.61	0
194	1108	ISA	111.63	0
195	1109	ISA	255200.68	0
196	1109	RSP_DEP	82194.41	0
197	1109	TFSA	20776.03	0
198	1109	THRIVE	153.68	1
199	1110	ISA	9.37	0
200	1110	RSP_DEP	6681.4	0
201	1110	TFSA	579.79	0
202	1110	THRIVE	1042.08	1
203	1111	ISA	220993.02	0
204	1111	RSP_DEP	7415.99	0
205	1111	TFSA	20860.11	0
206	1112	ISA	2089.53	0
207	1113	ISA	107425.5	0
208	1114	ISA	1.28	0
209	1115	GIC	13339.38	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
210	1115	ISA	95246.73	0
211	1115	RSP_DEP	15628.18	0
212	1115	TFSA	20949.37	0
213	1116	ISA	8712.92	0
214	1117	ISA	104916.62	0
215	1117	TFSA	13828.19	0
216	1118	ISA	9896.92	0
217	1118	TFSA	8226.62	0
218	1119	ISA	255.39	0
219	1119	TFSA	0.0	0
220	1120	ISA	82565.7	0
221	1121	ISA	150.85	0
222	1122	ISA	2515.02	0
223	1123	ISA	4086.67	0
224	1123	TFSA	5474.29	0
225	1124	TFSA	12992.04	0
226	1125	ISA	311001.12	0
227	1125	TFSA	15856.38	0
228	1126	ISA	4.04	0
229	1126	TFSA	0.0	0
230	1127	ISA	3124.06	0
231	1127	TFSA	26.92	0
232	1128	ISA	81.99	0
233	1129	ISA	1784.29	0
234	1129	TFSA	5474.29	0
235	1130	ISA	451.03	0
236	1131	ISA	19.18	0
237	1132	ISA	807.01	0
238	1132	TFSA	2.56	0
239	1133	TFSA	5455.83	0
240	1134	ISA	213.42	0
241	1134	TFSA	0.02	0
242	1135	ISA	818.51	0
243	1136	ISA	0.13	0
244	1136	TFSA	3.31	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
245	1137	ISA	0.35	0
246	1138	TFSA	1.25	0
247	1139	ISA	322.39	0
248	1139	MF	30799.76	0
249	1139	RSP_DEP	10.87	0
250	1139	THRIVE	0.02	1
251	1140	ISA	0.01	0
252	1140	TFSA	0.02	0
253	1141	ISA	0.06	0
254	1141	RSP_DEP	6201.82	0
255	1141	TFSA	2363.18	0
256	1142	ISA	97425.78	0
257	1142	MF	73521.77	0
258	1142	RSP_DEP	10934.58	0
259	1142	TFSA	20602.62	0
260	1143	ISA	2129.01	0
261	1143	TFSA	15534.25	0
262	1144	ISA	64.89	0
263	1144	RSP_DEP	7500.0	0
264	1145	ISA	104.57	0
265	1146	ISA	4.94	0
266	1146	MTG	204979.04	0
267	1146	RSP_DEP	52665.87	0
268	1148	ISA	9996.23	0
269	1149	ISA	3502.17	0
270	1150	ISA	10.74	0
271	1151	ISA	4.4	0
272	1152	ISA	0.05	0
273	1152	RSP_DEP	0.05	0
274	1153	ISA	99625.46	0
275	1153	RSP_DEP	60614.81	0
276	1154	GIC	40000.0	0
277	1154	ISA	13148.56	0
278	1155	ISA	86.09	0
279	1155	TFSA	5350.37	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
280	1156	ISA	56471.06	0
281	1156	TFSA	20934.02	0
282	1157	GIC	54994.47	0
283	1157	ISA	70346.4	0
284	1157	MF	129636.17	0
285	1157	TFSA	16087.98	0
286	1158	RSP_DEP	38330.49	0
287	1159	TFSA	24.78	0
288	1160	GIC	14116.15	0
289	1160	ISA	172660.21	0
290	1160	MF	15950.42	0
291	1160	RSP_DEP	24033.81	0
292	1160	TFSA	21084.05	0
293	1161	ISA	126.01	0
294	1162	ISA	108769.17	0
295	1162	MF	51283.62	0
296	1162	RSP_DEP	30096.61	0
297	1162	TFSA	20856.88	0
298	1163	ISA	5060.66	0
299	1163	RSP_DEP	7292.44	0
300	1164	ISA	43.44	0
301	1164	MF	7161.36	0
302	1164	TFSA	617.04	0
303	1165	ISA	97.38	0
304	1165	MF	7138.14	0
305	1165	MTG	194267.8	0
306	1165	RSP_DEP	19953.23	0
307	1165	TFSA	10593.25	0
308	1166	ISA	17340.79	0
309	1167	ISA	79760.48	0
310	1168	ISA	221.96	0
311	1169	GIC	184322.04	0
312	1169	ISA	1954.84	0
313	1169	TFSA	10898.02	0
314	1170	ISA	1.27	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
315	1171	ISA	38395.99	0
316	1171	TFSA	5488.12	0
317	1172	ISA	150.61	0
318	1172	MF	2294.15	0
319	1172	MTG	107214.26	0
320	1172	RSP_DEP	21897.67	0
321	1172	TFSA	17043.13	0
322	1173	ISA	3.23	0
323	1174	ISA	3.88	0
324	1175	ISA	52440.42	0
325	1175	RSP_DEP	0.0	0
326	1176	ISA	1065.27	0
327	1177	ISA	14.67	0
328	1178	ISA	5994.18	0
329	1179	ISA	7374.71	0
330	1179	RSP_DEP	1368.66	0
331	1180	ISA	6815.88	0
332	1180	RSP_DEP	15314.34	0
333	1180	TFSA	850.08	0
334	1181	ISA	16470.21	0
335	1181	RSP_DEP	2196.48	0
336	1181	TFSA	20680.29	0
337	1181	THRIVE	385.57	1
338	1182	TFSA	20858.73	0
339	1183	ISA	4.87	0
340	1184	ISA	11049.98	0
341	1184	TFSA	1611.5	0
342	1185	ISA	119584.75	0
343	1186	ISA	0.1	0
344	1187	ISA	3578.42	0
345	1187	MF	19477.3	0
346	1188	RSP_DEP	0.16	0
347	1188	TFSA	11.4	0
348	1189	GIC	25626.71	0
349	1189	ISA	552492.45	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
350	1189	TFSA	20847.95	0
351	1189	THRIVE	1790.17	1
352	1190	ISA	9.59	0
353	1190	RSP_DEP	9966.76	0
354	1190	TFSA	6528.26	0
355	1190	THRIVE	20.14	1
356	1191	ISA	100.06	0
357	1191	THRIVE	7.03	1
358	1192	ISA	11593.55	0
359	1192	RSP_DEP	6070.28	0
360	1193	ISA	11560.42	0
361	1193	TFSA	18797.72	0
362	1193	THRIVE	233.53	1
363	1194	ISA	17990.98	0
364	1194	TFSA	20870.23	0
365	1194	THRIVE	25.03	1
366	1195	ISA	1263.4	0
367	1195	MF	7431.33	0
368	1195	RSP_DEP	1026.5	0
369	1195	THRIVE	1354.06	1
370	1196	ISA	0.07	0
371	1196	TFSA	4018.24	0
372	1196	THRIVE	401.64	1
373	1197	ISA	2271.5	0
374	1197	MF	1358.53	0
375	1197	THRIVE	200.45	1
376	1198	TFSA	20846.58	0
377	1199	GIC	6500.0	0
378	1199	ISA	15199.39	0
379	1199	MF	6476.41	0
380	1199	MTG	25286.44	0
381	1199	RSP_DEP	20356.71	0
382	1199	TFSA	16708.63	0
383	1199	THRIVE	3347.98	1
384	1200	ISA	58.95	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
385	1200	TFSA	8662.17	0
386	1200	THRIVE	100.01	1
387	1201	ISA	5.99	0
388	1201	RSP_DEP	9.99	0
389	1201	TFSA	975.43	0
390	1201	THRIVE	771.14	1
391	1202	ISA	13698.51	0
392	1202	TFSA	20859.56	0
393	1202	THRIVE	100.18	1
394	1203	ISA	1.74	0
395	1204	ISA	69.67	0
396	1204	MF	3826.16	0
397	1204	RSP_DEP	7043.09	0
398	1204	TFSA	1135.67	0
399	1204	THRIVE	160.86	1
400	1205	ISA	1334.81	0
401	1205	RSP_DEP	151799.8	0
402	1205	TFSA	20521.43	0
403	1205	THRIVE	1515.32	1
404	1206	ISA	1.05	0
405	1206	THRIVE	217.98	1
406	1207	ISA	4.09	0
407	1207	RSP_DEP	0.32	0
408	1207	TFSA	3.07	0
409	1207	THRIVE	10.0	1
410	1208	ISA	49651.86	0
411	1208	TFSA	20860.11	0
412	1208	THRIVE	529.79	1
413	1209	ISA	1.26	0
414	1209	MTG	136712.99	0
415	1209	RSP_DEP	0.44	0
416	1209	TFSA	8.82	0
417	1209	THRIVE	2401.75	1
418	1210	ISA	0.1	0
419	1210	TFSA	129.43	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
420	1210	THRIVE	4.7	1
421	1211	ISA	5510.55	0
422	1211	TFSA	0.0	0
423	1211	THRIVE	0.0	1
424	1212	GIC	3105.57	0
425	1212	ISA	2447.42	0
426	1212	RSP_DEP	24800.53	0
427	1212	THRIVE	7044.67	1
428	1213	ISA	5.35	0
429	1213	TFSA	128.14	0
430	1213	THRIVE	2163.99	1
431	1214	ISA	23985.8	0
432	1214	TFSA	4922.3	0
433	1214	THRIVE	100.23	1
434	1215	ISA	514.17	0
435	1215	RSP_DEP	57644.67	0
436	1215	THRIVE	71.7	1
437	1216	GIC	10603.0	0
438	1216	ISA	10285.69	0
439	1216	MF	7029.02	0
440	1216	RSP_DEP	9710.45	0
441	1216	TFSA	354.89	0
442	1216	THRIVE	1153.38	1
443	1217	ISA	5.9	0
444	1217	THRIVE	586.28	1
445	1218	ISA	0.57	0
446	1219	ISA	382.53	0
447	1219	THRIVE	57.15	1
448	1220	ISA	1117.35	0
449	1220	THRIVE	5.05	1
450	1221	GIC	9910.54	0
451	1221	ISA	11503.04	0
452	1221	RSP_DEP	30278.44	0
453	1221	TFSA	20805.81	0
454	1222	ISA	46236.51	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
455	1222	MF	22323.49	0
456	1222	TFSA	0.83	0
457	1222	THRIVE	3003.32	1
458	1223	ISA	4.8	0
459	1224	ISA	68322.53	0
460	1224	RSP_DEP	16007.85	0
461	1224	TFSA	20650.93	0
462	1224	THRIVE	0.14	1
463	1225	ISA	8.85	0
464	1225	RSP_DEP	19462.48	0
465	1225	TFSA	61.04	0
466	1225	THRIVE	0.24	1
467	1226	ISA	30855.69	0
468	1226	MF	1077.43	0
469	1226	THRIVE	277.72	1
470	1227	ISA	17348.08	0
471	1227	TFSA	0.01	0
472	1228	ISA	100224.0	0
473	1228	THRIVE	7030.04	1
474	1229	ISA	0.06	0
475	1229	TFSA	9.62	0
476	1230	ISA	72941.92	0
477	1230	THRIVE	81.61	1
478	1231	GIC	23637.86	0
479	1231	ISA	3756.2	0
480	1231	RSP_DEP	37498.47	0
481	1231	TFSA	20725.19	0
482	1231	THRIVE	34955.77	1
483	1232	ISA	5704.65	0
484	1232	THRIVE	321.04	1
485	1233	ISA	172319.08	0
486	1233	MF	231866.91	0
487	1233	THRIVE	148.05	1
488	1234	ISA	24.09	0
489	1234	MTG	187111.61	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
490	1234	THRIVE	10.05	1
491	1235	ISA	35834.89	0
492	1235	MF	29805.39	0
493	1235	RSP_DEP	0.06	0
494	1235	TFSA	105.39	0
495	1235	THRIVE	104.64	1
496	1236	ISA	24734.65	0
497	1236	MF	20134.46	0
498	1236	RSP_DEP	2732.95	0
499	1236	TFSA	20824.53	0
500	1236	THRIVE	10.06	1
501	1237	ISA	1.04	0
502	1237	TFSA	1.09	0
503	1238	ISA	5.02	0
504	1239	ISA	277350.24	0
505	1239	THRIVE	30.05	1
506	1240	ISA	1126.92	0
507	1240	MF	20047.05	0
508	1240	TFSA	692.98	0
509	1240	THRIVE	1458.28	1
510	1241	ISA	9.91	0
511	1241	THRIVE	20.07	1
512	1242	ISA	20079.13	0
513	1242	THRIVE	659.92	1
514	1243	ISA	0.92	0
515	1243	THRIVE	3503.98	1
516	1244	ISA	9422.85	0
517	1244	TFSA	5747.77	0
518	1244	THRIVE	361.82	1
519	1245	ISA	27031.62	0
520	1245	RSP_DEP	57928.25	0
521	1245	TFSA	15454.43	0
522	1245	THRIVE	100.19	1
523	1246	ISA	506.57	0
524	1246	THRIVE	336.7	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
525	1247	ISA	204.1	0
526	1247	TFSA	5061.51	0
527	1247	THRIVE	1801.23	1
528	1248	ISA	952.75	0
529	1249	MTG	290588.98	0
530	1249	TFSA	6.17	0
531	1250	ISA	960.35	0
532	1250	MF	3422.91	0
533	1250	MTG	105085.55	0
534	1250	RSP_DEP	11534.44	0
535	1250	TFSA	4977.88	0
536	1250	THRIVE	250.58	1
537	1251	ISA	2.62	0
538	1252	GIC	1368.66	0
539	1252	ISA	5.4	0
540	1253	ISA	2155.9	0
541	1253	MF	13353.3	0
542	1253	MTG	224427.34	0
543	1253	RSP_DEP	11053.71	0
544	1253	THRIVE	891.81	1
545	1254	TFSA	1107.44	0
546	1254	THRIVE	100.21	1
547	1255	ISA	14691.33	0
548	1255	RSP_DEP	6843.53	0
549	1255	TFSA	20250.94	0
550	1256	ISA	2367.35	0
551	1256	THRIVE	90.0	1
552	1257	ISA	54766.92	0
553	1258	ISA	17710.66	0
554	1258	MTG	127749.31	0
555	1258	TFSA	20860.11	0
556	1258	THRIVE	3628.39	1
557	1259	ISA	6036.85	0
558	1260	ISA	0.52	0
559	1260	TFSA	0.04	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
560	1260	THRIVE	0.33	1
561	1261	ISA	18176.39	0
562	1261	MTG	364500.85	0
563	1261	THRIVE	10.88	1
564	1262	ISA	3092.33	0
565	1262	THRIVE	281.32	1
566	1263	ISA	58111.04	0
567	1263	TFSA	15631.84	0
568	1263	THRIVE	10516.94	1
569	1264	ISA	45659.41	0
570	1264	MTG	126228.47	0
571	1264	TFSA	6628.18	0
572	1264	THRIVE	25.07	1
573	1265	ISA	122252.01	0
574	1265	RSP_DEP	31534.94	0
575	1265	TFSA	20148.72	0
576	1265	THRIVE	1241.54	1
577	1266	ISA	0.14	0
578	1266	TFSA	36.3	0
579	1267	ISA	10576.65	0
580	1268	ISA	516.22	0
581	1268	MF	12962.32	0
582	1268	TFSA	806.46	0
583	1268	THRIVE	183.24	1
584	1269	ISA	3987.95	0
585	1269	TFSA	0.01	0
586	1269	THRIVE	2381.32	1
587	1270	ISA	12431.29	0
588	1271	ISA	7416.44	0
589	1271	TFSA	5375.7	0
590	1271	THRIVE	1900.65	1
591	1272	ISA	3603.14	0
592	1272	MF	5775.79	0
593	1272	RSP_DEP	10109.57	0
594	1272	TFSA	13017.03	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
595	1272	THRIVE	4980.33	1
596	1273	ISA	168195.35	0
597	1273	MF	66386.11	0
598	1273	TFSA	20848.84	0
599	1273	THRIVE	4376.18	1
600	1274	GIC	4687.33	0
601	1274	ISA	213.48	0
602	1275	ISA	206.12	0
603	1275	RSP_DEP	2392.71	0
604	1275	THRIVE	2.04	1
605	1276	ISA	4152.08	0
606	1277	ISA	98744.45	0
607	1277	TFSA	17181.98	0
608	1277	THRIVE	137.29	1
609	1278	ISA	95570.34	0
610	1278	RSP_DEP	6336.88	0
611	1278	THRIVE	500.34	1
612	1279	ISA	8.32	0
613	1280	ISA	74997.89	0
614	1280	RSP_DEP	20620.31	0
615	1280	TFSA	20857.94	0
616	1280	THRIVE	1575.77	1
617	1281	ISA	5270.15	0
618	1281	THRIVE	1556.15	1
619	1282	ISA	9.13	0
620	1282	MF	10592.94	0
621	1282	MTG	132873.76	0
622	1282	TFSA	9032.13	0
623	1282	THRIVE	2.66	1
624	1283	ISA	42172.61	0
625	1283	THRIVE	34.0	1
626	1284	ISA	172.55	0
627	1284	THRIVE	25.01	1
628	1285	ISA	6913.66	0
629	1285	THRIVE	2008.77	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
630	1286	ISA	3263.7	0
631	1287	ISA	43.59	0
632	1287	MF	1065.69	0
633	1287	RSP_DEP	7553.34	0
634	1287	TFSA	1219.09	0
635	1287	THRIVE	117.8	1
636	1288	ISA	3.72	0
637	1288	RSP_DEP	5547.93	0
638	1288	TFSA	74.63	0
639	1288	THRIVE	1165.77	1
640	1289	ISA	0.02	0
641	1289	RSP_DEP	1.36	0
642	1289	TFSA	0.01	0
643	1289	THRIVE	0.0	1
644	1290	ISA	4413.11	0
645	1290	THRIVE	142.85	1
646	1291	GIC	42864.29	0
647	1291	ISA	3259.68	0
648	1291	RSP_DEP	29763.13	0
649	1291	TFSA	10244.14	0
650	1291	THRIVE	1590.42	1
651	1292	ISA	2000.86	0
652	1293	ISA	1.17	0
653	1293	RSP_DEP	0.0	0
654	1294	ISA	93576.6	0
655	1294	RSP_DEP	2024.83	0
656	1294	TFSA	20457.88	0
657	1294	THRIVE	1318.44	1
658	1295	ISA	218.78	0
659	1295	THRIVE	9189.2	1
660	1296	ISA	607.62	0
661	1296	THRIVE	258.89	1
662	1297	ISA	14.06	0
663	1297	TFSA	307.73	0
664	1297	THRIVE	500.02	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
665	1298	ISA	8106.42	0
666	1298	THRIVE	699.78	1
667	1299	ISA	3311.36	0
668	1299	TFSA	20780.5	0
669	1299	THRIVE	153.67	1
670	1300	ISA	16852.54	0
671	1301	ISA	8008.98	0
672	1301	RSP_DEP	0.08	0
673	1301	TFSA	12514.63	0
674	1301	THRIVE	9.05	1
675	1302	ISA	2052.46	0
676	1302	MTG	488323.85	0
677	1303	ISA	1.15	0
678	1303	RSP_DEP	13050.7	0
679	1304	ISA	27503.64	0
680	1304	THRIVE	334.84	1
681	1305	ISA	169264.8	0
682	1305	THRIVE	10.02	1
683	1306	ISA	31904.33	0
684	1306	TFSA	20814.28	0
685	1306	THRIVE	10.03	1
686	1307	ISA	3077.9	0
687	1307	TFSA	10414.83	0
688	1308	ISA	656.15	0
689	1308	RSP_DEP	9602.07	0
690	1308	THRIVE	70.05	1
691	1309	ISA	2002.98	0
692	1309	RSP_DEP	1336.41	0
693	1309	THRIVE	289.85	1
694	1310	ISA	1825.49	0
695	1310	MF	126298.1	0
696	1310	RSP_DEP	35501.9	0
697	1310	TFSA	6.64	0
698	1310	THRIVE	15.11	1
699	1311	ISA	11.87	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
700	1312	ISA	0.27	0
701	1312	MF	2381.48	0
702	1312	MTG	163775.49	0
703	1313	ISA	5468.83	0
704	1313	RSP_DEP	1038.87	0
705	1313	TFSA	7195.3	0
706	1313	THRIVE	212.52	1
707	1314	ISA	0.01	0
708	1314	TFSA	284.18	0
709	1315	ISA	0.33	0
710	1315	RSP_DEP	11512.54	0
711	1315	TFSA	1001.36	0
712	1315	THRIVE	92.4	1
713	1316	ISA	1086.51	0
714	1316	THRIVE	100.19	1
715	1317	GIC	36.79	0
716	1317	ISA	2.9	0
717	1317	RSP_DEP	31.39	0
718	1317	TFSA	0.11	0
719	1317	THRIVE	5.28	1
720	1318	ISA	13807.47	0
721	1318	MTG	319698.2	0
722	1318	THRIVE	462.66	1
723	1319	ISA	5010.74	0
724	1319	THRIVE	100.0	1
725	1320	ISA	0.0	0
726	1320	TFSA	50.18	0
727	1320	THRIVE	17.88	1
728	1321	ISA	3414.68	0
729	1321	TFSA	0.0	0
730	1321	THRIVE	0.0	1
731	1322	ISA	100.43	0
732	1322	RSP_DEP	1350.13	0
733	1322	THRIVE	33.35	1
734	1323	ISA	2873.36	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
735	1323	RSP_DEP	2078.4	0
736	1323	TFSA	8052.75	0
737	1323	THRIVE	4463.87	1
738	1324	ISA	1311.19	0
739	1324	TFSA	5375.7	0
740	1324	THRIVE	2672.99	1
741	1325	GIC	66796.42	0
742	1325	ISA	29380.53	0
743	1325	RSP_DEP	13528.32	0
744	1325	TFSA	21009.6	0
745	1325	THRIVE	502.03	1
746	1326	ISA	0.12	0
747	1327	ISA	5773.22	0
748	1327	MF	13181.33	0
749	1327	THRIVE	51.47	1
750	1328	GIC	20000.0	0
751	1328	ISA	39787.82	0
752	1328	TFSA	21096.14	0
753	1328	THRIVE	10.08	1
754	1329	ISA	29560.39	0
755	1329	TFSA	25561.35	0
756	1329	THRIVE	100.0	1
757	1330	ISA	58674.11	0
758	1330	RSP_DEP	10417.74	0
759	1330	TFSA	20882.54	0
760	1331	ISA	3.18	0
761	1331	MF	189.18	0
762	1331	RSP_DEP	144.3	0
763	1331	TFSA	1578.4	0
764	1332	ISA	1455.36	0
765	1332	TFSA	0.96	0
766	1332	THRIVE	29.43	1
767	1333	ISA	0.04	0
768	1334	ISA	7.48	0
769	1334	TFSA	1426.38	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
770	1334	THRIVE	10.04	1
771	1335	ISA	0.03	0
772	1335	RSP_DEP	2.56	0
773	1336	ISA	630.43	0
774	1336	MF	1991.48	0
775	1336	RSP_DEP	1180.96	0
776	1336	THRIVE	50.18	1
777	1337	ISA	96483.49	0
778	1337	RSP_DEP	0.0	0
779	1338	GIC	11185.36	0
780	1338	ISA	11621.3	0
781	1338	RSP_DEP	12371.93	0
782	1338	THRIVE	1267.57	1
783	1339	ISA	445.0	0
784	1339	RSP_DEP	12806.65	0
785	1339	TFSA	411.63	0
786	1339	THRIVE	1176.18	1
787	1340	ISA	2720.79	0
788	1341	ISA	18.87	0
789	1342	ISA	1607.52	0
790	1342	RSP_DEP	18826.5	0
791	1342	THRIVE	373.0	1
792	1343	GIC	3664.67	0
793	1343	ISA	4352.21	0
794	1343	RSP_DEP	4164.57	0
795	1343	TFSA	0.02	0
796	1343	THRIVE	195.34	1
797	1344	ISA	1319.78	0
798	1344	MF	48109.82	0
799	1344	RSP_DEP	16589.2	0
800	1344	TFSA	7464.46	0
801	1344	THRIVE	492.22	1
802	1345	ISA	9155.25	0
803	1346	ISA	12.88	0
804	1347	ISA	15842.09	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
805	1347	TFSA	5182.15	0
806	1348	ISA	58058.32	0
807	1348	THRIVE	501.19	1
808	1349	ISA	17282.63	0
809	1349	THRIVE	190.42	1
810	1350	ISA	7.21	0
811	1351	ISA	658.85	0
812	1351	MF	2054.94	0
813	1351	TFSA	17171.05	0
814	1351	THRIVE	1781.52	1
815	1352	ISA	3713.79	0
816	1352	RSP_DEP	2076.12	0
817	1352	TFSA	20817.56	0
818	1352	THRIVE	12.97	1
819	1353	ISA	19358.24	0
820	1353	TFSA	8028.7	0
821	1353	THRIVE	61.66	1
822	1354	ISA	6068.85	0
823	1354	TFSA	5864.24	0
824	1354	THRIVE	200.17	1
825	1355	ISA	4421.53	0
826	1355	TFSA	71.85	0
827	1355	THRIVE	792.03	1
828	1356	ISA	0.92	0
829	1356	RSP_DEP	2021.7	0
830	1356	TFSA	15579.47	0
831	1356	THRIVE	17037.5	1
832	1357	ISA	12.7	0
833	1357	THRIVE	10.03	1
834	1358	ISA	2221.15	0
835	1358	MTG	180255.98	0
836	1358	TFSA	0.0	0
837	1359	ISA	39914.92	0
838	1359	TFSA	20330.64	0
839	1360	GIC	600.0	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
840	1360	ISA	88391.34	0
841	1360	THRIVE	281.7	1
842	1361	ISA	3.51	0
843	1361	TFSA	0.8	0
844	1361	THRIVE	0.01	1
845	1362	ISA	10.1	0
846	1363	ISA	2402.15	0
847	1363	RSP_DEP	0.24	0
848	1363	TFSA	37.0	0
849	1363	THRIVE	1363.25	1
850	1364	ISA	3536.31	0
851	1364	MF	97086.08	0
852	1364	MTG	90163.68	0
853	1364	RSP_DEP	0.76	0
854	1364	TFSA	3479.38	0
855	1364	THRIVE	2264.65	1
856	1365	ISA	4421.89	0
857	1365	TFSA	11008.48	0
858	1365	THRIVE	1663.85	1
859	1366	ISA	308.37	0
860	1367	ISA	151.71	0
861	1367	THRIVE	150.01	1
862	1368	ISA	21.4	0
863	1369	ISA	81.63	0
864	1369	TFSA	53.68	0
865	1370	GIC	10226.25	0
866	1370	ISA	19925.44	0
867	1370	TFSA	15765.37	0
868	1370	THRIVE	6490.39	1
869	1371	ISA	2078.21	0
870	1371	MF	2158.42	0
871	1371	TFSA	507.77	0
872	1371	THRIVE	35.16	1
873	1372	ISA	101.88	0
874	1373	TFSA	20203.05	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
875	1373	THRIVE	537.73	1
876	1374	ISA	235.89	0
877	1374	THRIVE	63.07	1
878	1375	ISA	3.81	0
879	1376	GIC	2439.72	0
880	1376	ISA	19259.12	0
881	1376	TFSA	10325.53	0
882	1377	ISA	12.87	0
883	1377	RSP_DEP	962.67	0
884	1378	ISA	2213.11	0
885	1378	RSP_DEP	71721.72	0
886	1378	TFSA	16401.2	0
887	1378	THRIVE	1112.55	1
888	1379	ISA	3936.59	0
889	1379	TFSA	10086.55	0
890	1379	THRIVE	1.89	1
891	1380	TFSA	5062.98	0
892	1381	ISA	67.28	0
893	1381	TFSA	0.0	0
894	1381	THRIVE	-276.64	1
895	1382	ISA	3743.11	0
896	1383	ISA	105.63	0
897	1383	RSP_DEP	96151.76	0
898	1383	TFSA	3.0	0
899	1383	THRIVE	200.41	1
900	1384	ISA	1.7	0
901	1384	MF	0.0	0
902	1385	GIC	10000.0	0
903	1385	ISA	9144.22	0
904	1385	TFSA	17682.81	0
905	1385	THRIVE	10.05	1
906	1386	ISA	262.01	0
907	1386	TFSA	349.68	0
908	1386	THRIVE	0.04	1
909	1387	ISA	4649.52	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
910	1387	MF	32.88	0
911	1387	RSP_DEP	41580.68	0
912	1387	TFSA	20853.18	0
913	1387	THRIVE	193.54	1
914	1388	ISA	2367.63	0
915	1389	ISA	4.03	0
916	1389	THRIVE	0.0	1
917	1390	ISA	22.04	0
918	1390	THRIVE	10.05	1
919	1391	ISA	2670.93	0
920	1391	RSP_DEP	28960.14	0
921	1391	TFSA	1342.67	0
922	1391	THRIVE	4529.27	1
923	1392	ISA	79644.55	0
924	1392	TFSA	20859.29	0
925	1392	THRIVE	1004.94	1
926	1393	ISA	42.54	0
927	1393	TFSA	9023.91	0
928	1394	ISA	9.2	0
929	1394	THRIVE	10.01	1
930	1395	MF	5884.45	0
931	1395	RSP_DEP	3025.98	0
932	1395	TFSA	1880.75	0
933	1395	THRIVE	1440.22	1
934	1396	ISA	0.0	0
935	1396	MF	1133.06	0
936	1396	TFSA	0.0	0
937	1397	ISA	57709.71	0
938	1397	TFSA	5375.7	0
939	1397	THRIVE	10.0	1
940	1398	ISA	430.04	0
941	1398	MF	8618.93	0
942	1398	RSP_DEP	651.8	0
943	1398	TFSA	108.77	0
944	1398	THRIVE	1568.1	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
945	1399	ISA	190.76	0
946	1399	MF	8164.45	0
947	1399	MTG	64255.82	0
948	1399	RSP_DEP	4691.6	0
949	1399	TFSA	2814.07	0
950	1400	ISA	8538.24	0
951	1400	RSP_DEP	4766.38	0
952	1400	THRIVE	501.21	1
953	1401	ISA	355.89	0
954	1401	TFSA	5116.82	0
955	1402	ISA	1593.6	0
956	1402	MF	10898.33	0
957	1402	TFSA	20858.35	0
958	1402	THRIVE	45.61	1
959	1403	ISA	0.09	0
960	1403	MF	0.0	0
961	1403	TFSA	0.0	0
962	1404	ISA	0.23	0
963	1404	RSP_DEP	2078.17	0
964	1404	THRIVE	0.0	1
965	1405	ISA	26542.72	0
966	1405	RSP_DEP	16016.08	0
967	1405	TFSA	15794.07	0
968	1405	THRIVE	5003.25	1
969	1406	ISA	0.11	0
970	1406	TFSA	47.72	0
971	1406	THRIVE	10.07	1
972	1407	ISA	8927.27	0
973	1408	ISA	3780.07	0
974	1408	MF	1865.82	0
975	1408	THRIVE	952.03	1
976	1409	ISA	1097.27	0
977	1409	MF	2392.32	0
978	1409	TFSA	1133.08	0
979	1410	GIC	16676.87	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
980	1410	ISA	6483.08	0
981	1410	TFSA	20245.61	0
982	1410	THRIVE	803.6	1
983	1411	ISA	56441.35	0
984	1411	RSP_DEP	26150.64	0
985	1411	TFSA	15722.19	0
986	1412	GIC	2412.85	0
987	1412	ISA	1256.66	0
988	1413	ISA	63623.37	0
989	1413	TFSA	10555.29	0
990	1413	THRIVE	3625.22	1
991	1414	GIC	10121.11	0
992	1414	ISA	98024.63	0
993	1414	TFSA	15413.24	0
994	1414	THRIVE	983.93	1
995	1415	ISA	9346.35	0
996	1415	MTG	160294.24	0
997	1415	THRIVE	2705.36	1
998	1416	ISA	2092.32	0
999	1416	RSP_DEP	1264.57	0
1000	1416	TFSA	6006.84	0
1001	1416	THRIVE	10.12	1
1002	1417	ISA	10218.0	0
1003	1417	TFSA	15676.56	0
1004	1418	ISA	24395.0	0
1005	1418	TFSA	20860.11	0
1006	1418	THRIVE	10.49	1
1007	1419	ISA	79679.57	0
1008	1419	TFSA	10444.91	0
1009	1419	THRIVE	100.03	1
1010	1420	RSP_DEP	1.02	0
1011	1420	TFSA	0.18	0
1012	1421	ISA	1.03	0
1013	1421	TFSA	1.02	0
1014	1421	THRIVE	309.69	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1015	1422	ISA	1213.86	0
1016	1422	TFSA	15618.99	0
1017	1423	ISA	0.06	0
1018	1423	TFSA	2405.67	0
1019	1424	GIC	85500.0	0
1020	1424	ISA	50658.08	0
1021	1424	TFSA	0.0	0
1022	1424	THRIVE	10.08	1
1023	1425	ISA	5010.25	0
1024	1425	TFSA	15478.41	0
1025	1425	THRIVE	3.88	1
1026	1426	MF	1486.33	0
1027	1426	MTG	209555.41	0
1028	1426	RSP_DEP	47103.1	0
1029	1426	THRIVE	611.18	1
1030	1427	ISA	8.7	0
1031	1427	TFSA	36.04	0
1032	1427	THRIVE	7.51	1
1033	1428	ISA	201.44	0
1034	1428	RSP_DEP	1617.8	0
1035	1428	TFSA	370.25	0
1036	1428	THRIVE	1542.89	1
1037	1429	ISA	2450.27	0
1038	1429	RSP_DEP	2853.7	0
1039	1429	THRIVE	5.06	1
1040	1430	ISA	19374.65	0
1041	1430	RSP_DEP	14490.68	0
1042	1430	TFSA	2.84	0
1043	1430	THRIVE	0.8	1
1044	1431	TFSA	1697.8	0
1045	1431	THRIVE	96.38	1
1046	1432	ISA	9.97	0
1047	1433	GIC	26611.51	0
1048	1433	ISA	5339.87	0
1049	1433	RSP_DEP	726.97	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1050	1434	GIC	10216.18	0
1051	1434	ISA	27888.22	0
1052	1434	MF	8312.47	0
1053	1434	TFSA	5060.42	0
1054	1435	ISA	94.97	0
1055	1435	MF	5157.23	0
1056	1435	TFSA	15888.17	0
1057	1435	THRIVE	737.85	1
1058	1436	ISA	742.41	0
1059	1436	RSP_DEP	89406.87	0
1060	1436	TFSA	1010.54	0
1061	1436	THRIVE	2844.99	1
1062	1437	ISA	101595.36	0
1063	1437	TFSA	20860.11	0
1064	1437	THRIVE	34.17	1
1065	1438	ISA	1.87	0
1066	1439	ISA	10.79	0
1067	1439	RSP_DEP	972.65	0
1068	1439	THRIVE	1451.14	1
1069	1440	TFSA	5392.28	0
1070	1441	ISA	2664.97	0
1071	1442	ISA	16713.17	0
1072	1442	MTG	193984.1	0
1073	1442	RSP_DEP	126843.57	0
1074	1442	TFSA	10086.45	0
1075	1442	THRIVE	50.31	1
1076	1443	ISA	0.32	0
1077	1443	MF	2954.26	0
1078	1443	TFSA	17.27	0
1079	1443	THRIVE	0.21	1
1080	1444	ISA	0.29	0
1081	1444	THRIVE	10.06	1
1082	1445	ISA	13.18	0
1083	1445	TFSA	5159.52	0
1084	1445	THRIVE	435.99	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1085	1446	ISA	89838.77	0
1086	1446	TFSA	20667.54	0
1087	1446	THRIVE	350.86	1
1088	1447	ISA	9199.25	0
1089	1447	THRIVE	56.02	1
1090	1448	ISA	7.29	0
1091	1448	TFSA	1.67	0
1092	1448	THRIVE	2.99	1
1093	1449	ISA	0.43	0
1094	1449	TFSA	213.02	0
1095	1449	THRIVE	10.03	1
1096	1450	ISA	54103.38	0
1097	1450	TFSA	15705.92	0
1098	1450	THRIVE	10.02	1
1099	1451	GIC	4545.73	0
1100	1451	ISA	256.66	0
1101	1451	RSP_DEP	0.02	0
1102	1452	ISA	3.67	0
1103	1453	TFSA	15644.74	0
1104	1454	ISA	82134.55	0
1105	1454	RSP_DEP	37804.15	0
1106	1454	TFSA	4833.7	0
1107	1454	THRIVE	5200.75	1
1108	1455	GIC	62000.0	0
1109	1455	ISA	11.52	0
1110	1455	RSP_DEP	20662.4	0
1111	1455	TFSA	16192.51	0
1112	1455	THRIVE	854.82	1
1113	1456	ISA	1.67	0
1114	1456	RSP_DEP	153995.6	0
1115	1456	TFSA	6178.79	0
1116	1456	THRIVE	224.38	1
1117	1457	ISA	92755.75	0
1118	1457	THRIVE	38.48	1
1119	1458	ISA	525.57	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1120	1458	RSP_DEP	0.46	0
1121	1458	THRIVE	2484.22	1
1122	1459	ISA	907.99	0
1123	1459	MF	1119.48	0
1124	1459	RSP_DEP	63454.44	0
1125	1459	TFSA	3.12	0
1126	1459	THRIVE	2313.87	1
1127	1460	ISA	245.16	0
1128	1460	MF	1560.45	0
1129	1460	MTG	190049.75	0
1130	1460	TFSA	492.02	0
1131	1460	THRIVE	10042.58	1
1132	1461	ISA	1.39	0
1133	1461	THRIVE	12757.67	1
1134	1462	GIC	27004.97	0
1135	1462	ISA	23014.84	0
1136	1462	TFSA	20707.53	0
1137	1462	THRIVE	10.46	1
1138	1463	ISA	2.78	0
1139	1464	ISA	63.81	0
1140	1465	GIC	2954.1	0
1141	1465	ISA	1070.5	0
1142	1465	MF	10499.64	0
1143	1465	MTG	29051.91	0
1144	1465	RSP_DEP	59275.42	0
1145	1465	TFSA	10750.27	0
1146	1465	THRIVE	5513.32	1
1147	1466	GIC	76245.35	0
1148	1466	ISA	44171.81	0
1149	1466	MTG	163629.2	0
1150	1466	RSP_DEP	5156.62	0
1151	1466	TFSA	20682.82	0
1152	1466	THRIVE	1002.38	1
1153	1467	ISA	45.49	0
1154	1468	ISA	1.02	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1155	1469	ISA	0.69	0
1156	1470	ISA	0.84	0
1157	1470	TFSA	0.85	0
1158	1471	GIC	6734.64	0
1159	1471	ISA	2844.26	0
1160	1471	RSP_DEP	17964.56	0
1161	1471	TFSA	5148.92	0
1162	1471	THRIVE	931.29	1
1163	1472	ISA	5.79	0
1164	1472	TFSA	19299.52	0
1165	1472	THRIVE	8130.48	1
1166	1473	ISA	0.02	0
1167	1473	TFSA	0.0	0
1168	1473	THRIVE	0.0	1
1169	1474	ISA	9186.03	0
1170	1474	RSP_DEP	17015.33	0
1171	1474	TFSA	2102.56	0
1172	1474	THRIVE	48.22	1
1173	1475	ISA	2918.55	0
1174	1475	THRIVE	100.02	1
1175	1476	ISA	85638.5	0
1176	1476	TFSA	15673.29	0
1177	1476	THRIVE	340.91	1
1178	1477	ISA	9036.45	0
1179	1477	MF	13114.63	0
1180	1477	TFSA	15700.54	0
1181	1477	THRIVE	4310.0	1
1182	1478	ISA	14.78	0
1183	1478	MTG	127128.55	0
1184	1478	THRIVE	571.86	1
1185	1479	ISA	4017.07	0
1186	1479	TFSA	9988.33	0
1187	1479	THRIVE	27.15	1
1188	1480	ISA	64194.03	0
1189	1480	MF	431.2	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1190	1480	RSP_DEP	28.15	0
1191	1480	TFSA	18234.31	0
1192	1480	THRIVE	124.06	1
1193	1481	ISA	485.66	0
1194	1481	TFSA	0.18	0
1195	1481	THRIVE	21.29	1
1196	1482	ISA	10063.81	0
1197	1483	ISA	43.79	0
1198	1484	ISA	87374.83	0
1199	1484	TFSA	20860.11	0
1200	1484	THRIVE	604.24	1
1201	1485	GIC	130767.02	0
1202	1485	ISA	207630.21	0
1203	1485	THRIVE	1.58	1
1204	1486	ISA	12302.48	0
1205	1486	RSP_DEP	42910.6	0
1206	1486	TFSA	10269.82	0
1207	1487	ISA	12129.33	0
1208	1487	TFSA	0.0	0
1209	1487	THRIVE	6236.67	1
1210	1488	ISA	1.2	0
1211	1489	ISA	6.55	0
1212	1490	ISA	24.74	0
1213	1491	ISA	0.38	0
1214	1492	ISA	80.12	0
1215	1492	RSP_DEP	1481.86	0
1216	1492	TFSA	0.0	0
1217	1492	THRIVE	515.33	1
1218	1493	ISA	5.41	0
1219	1494	ISA	14078.24	0
1220	1494	TFSA	20996.88	0
1221	1494	THRIVE	24.16	1
1222	1495	ISA	38.89	0
1223	1495	MF	7747.16	0
1224	1495	THRIVE	775.68	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1225	1496	GIC	2000.0	0
1226	1496	ISA	1273.13	0
1227	1497	ISA	61505.55	0
1228	1497	TFSA	20662.97	0
1229	1497	THRIVE	10.01	1
1230	1498	ISA	9.12	0
1231	1499	ISA	671.02	0
1232	1499	RSP_DEP	1098.24	0
1233	1499	TFSA	8545.23	0
1234	1499	THRIVE	798.53	1
1235	1500	GIC	130044.54	0
1236	1500	ISA	1869.59	0
1237	1500	RSP_DEP	133669.9	0
1238	1500	TFSA	15909.14	0
1239	1500	THRIVE	5401.9	1
1240	1501	GIC	10000.0	0
1241	1501	ISA	92308.87	0
1242	1501	THRIVE	657.09	1
1243	1502	ISA	376.7	0
1244	1503	ISA	2510.72	0
1245	1503	MTG	52733.1	0
1246	1503	RSP_DEP	182935.81	0
1247	1503	TFSA	1.26	0
1248	1503	THRIVE	1074.87	1
1249	1504	ISA	247.13	0
1250	1504	THRIVE	325.14	1
1251	1505	ISA	29058.87	0
1252	1505	THRIVE	0.0	1
1253	1506	ISA	1.03	0
1254	1506	TFSA	30.52	0
1255	1506	THRIVE	451.45	1
1256	1507	ISA	27116.33	0
1257	1507	THRIVE	18010.0	1
1258	1508	ISA	70.83	0
1259	1508	RSP_DEP	832.25	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1260	1508	TFSA	61.74	0
1261	1508	THRIVE	301.29	1
1262	1509	ISA	562.39	0
1263	1509	MTG	149235.08	0
1264	1509	TFSA	789.19	0
1265	1509	THRIVE	457.17	1
1266	1510	ISA	0.01	0
1267	1511	ISA	3.3	0
1268	1511	RSP_DEP	7.29	0
1269	1511	TFSA	456.65	0
1270	1511	THRIVE	100.49	1
1271	1512	ISA	0.65	0
1272	1512	RSP_DEP	0.99	0
1273	1512	TFSA	0.15	0
1274	1512	THRIVE	940.81	1
1275	1513	ISA	327.37	0
1276	1513	RSP_DEP	26425.49	0
1277	1513	TFSA	5244.31	0
1278	1513	THRIVE	0.23	1
1279	1514	ISA	601.57	0
1280	1514	MTG	133963.6	0
1281	1514	THRIVE	0.5	1
1282	1515	ISA	15810.14	0
1283	1515	TFSA	12417.53	0
1284	1515	THRIVE	1498.76	1
1285	1516	ISA	0.0	0
1286	1516	TFSA	0.0	0
1287	1516	THRIVE	0.0	1
1288	1517	ISA	1161.34	0
1289	1517	TFSA	7423.39	0
1290	1517	THRIVE	20.01	1
1291	1518	ISA	107.56	0
1292	1519	ISA	23718.42	0
1293	1519	THRIVE	0.79	1
1294	1520	ISA	36699.44	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1295	1520	TFSA	0.0	0
1296	1520	THRIVE	939.59	1
1297	1521	ISA	34352.55	0
1298	1521	THRIVE	858.47	1
1299	1522	ISA	2461.17	0
1300	1522	THRIVE	292.63	1
1301	1523	ISA	2816.32	0
1302	1523	TFSA	5912.63	0
1303	1523	THRIVE	11.14	1
1304	1524	ISA	6.53	0
1305	1524	MF	5445.53	0
1306	1524	RSP_DEP	6537.06	0
1307	1524	TFSA	1296.11	0
1308	1524	THRIVE	841.15	1
1309	1525	ISA	12.44	0
1310	1525	MTG	315303.15	0
1311	1525	TFSA	13.15	0
1312	1525	THRIVE	10.02	1
1313	1526	TFSA	157.38	0
1314	1527	ISA	106.07	0
1315	1527	TFSA	0.0	0
1316	1527	THRIVE	11126.68	1
1317	1528	ISA	2096.53	0
1318	1528	TFSA	0.53	0
1319	1529	ISA	3238.28	0
1320	1529	TFSA	15089.39	0
1321	1530	ISA	4.86	0
1322	1531	RSP_DEP	3635.57	0
1323	1532	GIC	20703.84	0
1324	1532	ISA	19057.56	0
1325	1532	RSP_DEP	0.0	0
1326	1533	ISA	0.06	0
1327	1534	ISA	3291.27	0
1328	1534	TFSA	2574.58	0
1329	1535	ISA	0.61	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1330	1535	TFSA	15017.39	0
1331	1536	ISA	0.08	0
1332	1537	ISA	0.24	0
1333	1537	MTG	295975.45	0
1334	1537	TFSA	432.81	0
1335	1538	ISA	10.56	0
1336	1539	TFSA	11207.18	0
1337	1540	ISA	1437.14	0
1338	1540	RSP_DEP	4941.5	0
1339	1540	TFSA	5375.7	0
1340	1541	ISA	4440.39	0
1341	1542	ISA	683.72	0
1342	1543	ISA	6605.63	0
1343	1544	ISA	128.75	0
1344	1545	ISA	38676.89	0
1345	1545	MTG	122094.0	0
1346	1545	TFSA	1196.46	0
1347	1545	THRIVE	0.59	1
1348	1546	ISA	2482.54	0
1349	1546	MF	1616.64	0
1350	1546	MTG	314667.64	0
1351	1546	RSP_DEP	10460.4	0
1352	1546	TFSA	6371.53	0
1353	1547	ISA	0.01	0
1354	1547	TFSA	8190.15	0
1355	1548	ISA	8.62	0
1356	1548	TFSA	12.02	0
1357	1549	GIC	624.79	0
1358	1549	ISA	177.7	0
1359	1550	ISA	0.38	0
1360	1551	ISA	43146.51	0
1361	1551	MTG	148889.28	0
1362	1551	TFSA	0.03	0
1363	1552	ISA	7.93	0
1364	1552	RSP_DEP	3130.24	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1365	1553	ISA	53.6	0
1366	1554	RSP_DEP	1198.43	0
1367	1554	TFSA	725.94	0
1368	1555	ISA	244.83	0
1369	1556	RSP_DEP	1865.3	0
1370	1556	TFSA	10398.21	0
1371	1557	ISA	10351.84	0
1372	1557	TFSA	15237.05	0
1373	1558	ISA	42.93	0
1374	1559	RSP_DEP	43458.05	0
1375	1559	TFSA	0.0	0
1376	1560	ISA	7731.38	0
1377	1561	ISA	32583.18	0
1378	1562	ISA	3.33	0
1379	1563	ISA	84.62	0
1380	1563	MF	7340.32	0
1381	1563	RSP_DEP	2887.13	0
1382	1564	ISA	2592.68	0
1383	1564	TFSA	5374.91	0
1384	1565	ISA	0.02	0
1385	1566	ISA	186.78	0
1386	1567	RSP_DEP	1117.87	0
1387	1567	TFSA	3516.33	0
1388	1568	RSP_DEP	15275.11	0
1389	1569	ISA	11.98	0
1390	1570	TFSA	2030.33	0
1391	1571	ISA	46.97	0
1392	1571	MF	10268.02	0
1393	1571	TFSA	10659.63	0
1394	1572	ISA	915.64	0
1395	1572	MF	12761.12	0
1396	1572	RSP_DEP	13855.23	0
1397	1572	TFSA	3023.98	0
1398	1573	ISA	5.02	0
1399	1574	ISA	1.8	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1400	1575	ISA	0.98	0
1401	1576	ISA	3.63	0
1402	1577	TFSA	15280.88	0
1403	1578	ISA	606.14	0
1404	1578	TFSA	1.75	0
1405	1579	ISA	0.04	0
1406	1579	TFSA	114.41	0
1407	1580	ISA	198.86	0
1408	1580	TFSA	137.71	0
1409	1581	ISA	23.15	0
1410	1582	TFSA	107.2	0
1411	1583	RSP_DEP	49138.24	0
1412	1584	ISA	1747.25	0
1413	1585	ISA	0.12	0
1414	1585	RSP_DEP	1.57	0
1415	1586	ISA	42.23	0
1416	1587	ISA	0.14	0
1417	1587	MF	40.96	0
1418	1587	RSP_DEP	0.89	0
1419	1587	TFSA	3.16	0
1420	1588	ISA	29765.4	0
1421	1588	TFSA	5000.0	0
1422	1589	ISA	17295.79	0
1423	1589	TFSA	17637.54	0
1424	1590	ISA	4.0	0
1425	1590	TFSA	1.35	0
1426	1591	ISA	2023.98	0
1427	1591	TFSA	8403.91	0
1428	1592	ISA	0.84	0
1429	1592	RSP_DEP	0.21	0
1430	1592	TFSA	0.69	0
1431	1593	ISA	1001.46	0
1432	1593	MF	5598.16	0
1433	1593	TFSA	11640.64	0
1434	1594	ISA	4335.81	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1435	1595	TFSA	2.59	0
1436	1596	ISA	1.19	0
1437	1596	TFSA	101.31	0
1438	1597	ISA	26.52	0
1439	1598	ISA	501.15	0
1440	1599	ISA	1.47	0
1441	1599	TFSA	0.0	0
1442	1600	ISA	3299.41	0
1443	1601	ISA	64.3	0
1444	1601	TFSA	20860.11	0
1445	1602	ISA	603.46	0
1446	1602	TFSA	368.35	0
1447	1603	RSP_DEP	18148.52	0
1448	1603	TFSA	9975.32	0
1449	1604	ISA	4369.27	0
1450	1605	ISA	12650.69	0
1451	1606	ISA	1.03	0
1452	1607	ISA	2.03	0
1453	1608	ISA	54.96	0
1454	1608	MF	25.39	0
1455	1608	TFSA	2.84	0
1456	1609	ISA	533.69	0
1457	1610	ISA	113227.97	0
1458	1610	MF	3152.04	0
1459	1610	RSP_DEP	5992.24	0
1460	1610	TFSA	5368.31	0
1461	1611	TFSA	9839.68	0
1462	1612	ISA	265.82	0
1463	1612	TFSA	989.1	0
1464	1613	ISA	4592.47	0
1465	1613	TFSA	7112.17	0
1466	1614	ISA	15945.33	0
1467	1614	MF	0.0	0
1468	1614	TFSA	18702.82	0
1469	1615	ISA	69.93	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1470	1616	TFSA	745.05	0
1471	1617	RSP_DEP	5751.12	0
1472	1617	TFSA	1728.5	0
1473	1618	ISA	0.38	0
1474	1619	ISA	7.65	0
1475	1619	TFSA	7.91	0
1476	1620	ISA	530.68	0
1477	1621	ISA	1.99	0
1478	1622	ISA	470.67	0
1479	1623	ISA	28337.57	0
1480	1623	TFSA	4434.53	0
1481	1624	ISA	0.97	0
1482	1625	ISA	2246.84	0
1483	1626	ISA	1048.82	0
1484	1626	RSP_DEP	446.18	0
1485	1627	ISA	0.0	0
1486	1627	TFSA	4851.29	0
1487	1628	ISA	10.3	0
1488	1629	ISA	0.06	0
1489	1630	ISA	0.0	0
1490	1631	ISA	21.37	0
1491	1632	TFSA	8494.92	0
1492	1633	ISA	3964.11	0
1493	1633	TFSA	14611.02	0
1494	1634	ISA	4044.84	0
1495	1634	TFSA	15174.9	0
1496	1635	TFSA	7.54	0
1497	1636	ISA	528.87	0
1498	1637	ISA	239.04	0
1499	1637	RSP_DEP	309.66	0
1500	1637	TFSA	261.56	0
1501	1638	ISA	1054.36	0
1502	1638	TFSA	1.14	0
1503	1639	ISA	100183.6	0
1504	1640	TFSA	669.45	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1505	1641	ISA	60.28	0
1506	1641	TFSA	102.43	0
1507	1642	ISA	4659.4	0
1508	1642	THRIVE	178.45	1
1509	1643	GIC	6898.58	0
1510	1644	ISA	2017.54	0
1511	1645	ISA	9188.63	0
1512	1646	ISA	50.09	0
1513	1647	TFSA	510.6	0
1514	1648	ISA	21.56	0
1515	1649	ISA	6.63	0
1516	1649	TFSA	25.05	0
1517	1650	ISA	1.25	0
1518	1650	TFSA	3.46	0
1519	1651	ISA	14.77	0
1520	1651	RSP_DEP	18174.32	0
1521	1652	ISA	6.45	0
1522	1652	TFSA	0.84	0
1523	1653	ISA	20.95	0
1524	1653	MF	17.54	0
1525	1654	ISA	1.7	0
1526	1654	RSP_DEP	252.38	0
1527	1655	ISA	11684.39	0
1528	1656	ISA	9757.26	0
1529	1657	ISA	11911.14	0
1530	1657	TFSA	621.18	0
1531	1658	GIC	16000.0	0
1532	1658	ISA	13006.7	0
1533	1658	MF	8202.43	0
1534	1658	TFSA	6086.62	0
1535	1659	ISA	1.11	0
1536	1660	ISA	50626.88	0
1537	1661	ISA	71.85	0
1538	1661	TFSA	44.47	0
1539	1662	ISA	0.03	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1540	1663	ISA	1013.35	0
1541	1664	ISA	55939.88	0
1542	1664	TFSA	5106.97	0
1543	1665	TFSA	28.7	0
1544	1666	ISA	34.93	0
1545	1667	ISA	1.1	0
1546	1667	RSP_DEP	40293.62	0
1547	1668	ISA	43257.18	0
1548	1668	THRIVE	110.01	1
1549	1669	GIC	29639.75	0
1550	1669	ISA	42228.11	0
1551	1670	ISA	15993.26	0
1552	1671	ISA	16471.01	0
1553	1672	ISA	0.98	0
1554	1672	TFSA	0.46	0
1555	1673	ISA	1.67	0
1556	1674	ISA	4305.43	0
1557	1674	TFSA	10212.33	0
1558	1674	THRIVE	166.45	1
1559	1675	ISA	10843.97	0
1560	1675	RSP_DEP	2573.08	0
1561	1676	ISA	0.01	0
1562	1676	TFSA	227.55	0
1563	1677	ISA	0.02	0
1564	1677	TFSA	585.49	0
1565	1678	ISA	0.0	0
1566	1678	TFSA	1372.06	0
1567	1679	ISA	11.86	0
1568	1680	ISA	1.4	0
1569	1680	TFSA	8360.45	0
1570	1681	ISA	10037.53	0
1571	1681	TFSA	3321.43	0
1572	1682	ISA	196122.65	0
1573	1682	MF	546.07	0
1574	1683	ISA	100.09	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1575	1684	ISA	33984.41	0
1576	1684	TFSA	5030.27	0
1577	1685	RSP_DEP	14035.15	0
1578	1686	ISA	0.76	0
1579	1687	ISA	318.59	0
1580	1688	ISA	511.21	0
1581	1689	ISA	40691.04	0
1582	1689	TFSA	15769.34	0
1583	1690	ISA	3279.03	0
1584	1690	TFSA	238.5	0
1585	1691	ISA	10.64	0
1586	1692	TFSA	18.68	0
1587	1693	ISA	53.98	0
1588	1694	ISA	0.0	0
1589	1694	TFSA	8756.42	0
1590	1695	TFSA	9021.15	0
1591	1696	ISA	5.53	0
1592	1696	TFSA	2.55	0
1593	1697	ISA	93.12	0
1594	1698	ISA	151.76	0
1595	1699	ISA	163.63	0
1596	1700	GIC	3000.0	0
1597	1700	ISA	1301.38	0
1598	1700	MF	6626.46	0
1599	1700	TFSA	11061.22	0
1600	1701	ISA	2479.05	0
1601	1701	TFSA	489.43	0
1602	1702	ISA	0.0	0
1603	1703	ISA	0.3	0
1604	1704	ISA	719.95	0
1605	1705	ISA	355.9	0
1606	1705	TFSA	93.5	0
1607	1706	ISA	0.05	0
1608	1706	RSP_DEP	21.19	0
1609	1706	TFSA	0.0	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1610	1707	ISA	3373.51	0
1611	1708	TFSA	7.18	0
1612	1709	ISA	329.68	0
1613	1710	ISA	0.0	0
1614	1710	TFSA	3.77	0
1615	1711	ISA	24901.41	0
1616	1711	RSP_DEP	12051.38	0
1617	1711	TFSA	15105.79	0
1618	1712	ISA	41.77	0
1619	1713	ISA	52941.99	0
1620	1714	ISA	3712.13	0
1621	1715	ISA	20630.69	0
1622	1716	ISA	18.46	0
1623	1717	ISA	3905.21	0
1624	1718	ISA	0.01	0
1625	1718	RSP_DEP	0.0	0
1626	1718	TFSA	0.02	0
1627	1719	ISA	0.02	0
1628	1719	RSP_DEP	2181.28	0
1629	1719	TFSA	605.33	0
1630	1720	TFSA	120.99	0
1631	1721	RSP_DEP	1460.81	0
1632	1722	ISA	0.26	0
1633	1723	ISA	27.04	0
1634	1724	ISA	9.49	0
1635	1725	ISA	1999.64	0
1636	1726	ISA	8.5	0
1637	1726	RSP_DEP	0.22	0
1638	1727	GIC	5691.34	0
1639	1727	ISA	50.01	0
1640	1728	ISA	1.12	0
1641	1729	ISA	9053.3	0
1642	1729	TFSA	4.18	0
1643	1730	ISA	5294.16	0
1644	1731	TFSA	9299.96	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1645	1732	ISA	5032.67	0
1646	1733	ISA	0.16	0
1647	1733	RSP_DEP	36625.29	0
1648	1733	TFSA	4.95	0
1649	1734	ISA	237.83	0
1650	1735	ISA	322.82	0
1651	1736	TFSA	13.39	0
1652	1737	ISA	0.33	0
1653	1738	ISA	52.03	0
1654	1739	ISA	14444.53	0
1655	1739	TFSA	15434.69	0
1656	1740	ISA	7.35	0
1657	1740	MTG	364984.39	0
1658	1740	TFSA	13849.56	0
1659	1741	ISA	5.41	0
1660	1742	ISA	7.44	0
1661	1743	ISA	0.04	0
1662	1744	ISA	400.67	0
1663	1745	ISA	2.24	0
1664	1745	RSP_DEP	13142.08	0
1665	1745	TFSA	17890.89	0
1666	1746	TFSA	826.54	0
1667	1747	ISA	10.21	0
1668	1748	ISA	28849.76	0
1669	1748	MF	4007.38	0
1670	1748	TFSA	15702.51	0
1671	1749	ISA	1.0	0
1672	1749	MF	3479.88	0
1673	1749	TFSA	1.0	0
1674	1750	GIC	2311.68	0
1675	1750	ISA	4125.54	0
1676	1750	MF	4268.24	0
1677	1750	RSP_DEP	0.49	0
1678	1750	TFSA	16641.74	0
1679	1750	THRIVE	100.4	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1680	1751	ISA	2.87	0
1681	1751	TFSA	7308.51	0
1682	1752	ISA	1.76	0
1683	1752	RSP_DEP	0.0	0
1684	1752	TFSA	5.34	0
1685	1753	ISA	1.01	0
1686	1754	ISA	359.44	0
1687	1754	RSP_DEP	8000.0	0
1688	1755	ISA	471.99	0
1689	1755	RSP_DEP	3332.79	0
1690	1756	ISA	4501.59	0
1691	1756	MF	2651.48	0
1692	1756	RSP_DEP	0.03	0
1693	1757	ISA	31067.72	0
1694	1757	TFSA	20870.58	0
1695	1758	ISA	107.61	0
1696	1759	ISA	100.42	0
1697	1759	TFSA	100.42	0
1698	1760	ISA	1231.09	0
1699	1761	ISA	78.0	0
1700	1761	RSP_DEP	68.16	0
1701	1761	TFSA	21.99	0
1702	1762	ISA	11794.06	0
1703	1763	ISA	4.81	0
1704	1764	ISA	617.18	0
1705	1765	ISA	0.01	0
1706	1765	RSP_DEP	2175.91	0
1707	1765	TFSA	134.76	0
1708	1766	ISA	101.03	0
1709	1767	ISA	14717.36	0
1710	1767	MF	99.05	0
1711	1767	RSP_DEP	76.13	0
1712	1767	TFSA	1222.27	0
1713	1768	ISA	10.57	0
1714	1769	ISA	0.01	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1715	1769	TFSA	109.86	0
1716	1770	ISA	0.08	0
1717	1770	RSP_DEP	0.37	0
1718	1770	TFSA	28.72	0
1719	1771	ISA	130.98	0
1720	1772	ISA	2016.88	0
1721	1773	ISA	383.7	0
1722	1773	MF	5911.35	0
1723	1774	ISA	211234.23	0
1724	1774	RSP_DEP	27797.04	0
1725	1774	TFSA	20660.9	0
1726	1775	ISA	14.34	0
1727	1776	ISA	4.61	0
1728	1777	TFSA	1039.67	0
1729	1778	ISA	2744.46	0
1730	1779	ISA	162.44	0
1731	1780	ISA	1.12	0
1732	1781	ISA	11791.37	0
1733	1781	MTG	344326.98	0
1734	1781	TFSA	4402.36	0
1735	1782	ISA	5551.99	0
1736	1782	MF	10458.81	0
1737	1782	RSP_DEP	15362.07	0
1738	1782	TFSA	10521.46	0
1739	1782	THRIVE	2490.1	1
1740	1783	ISA	1.01	0
1741	1784	ISA	56.73	0
1742	1784	TFSA	0.0	0
1743	1784	THRIVE	18.51	1
1744	1785	ISA	0.01	0
1745	1785	TFSA	8.0	0
1746	1786	ISA	7051.8	0
1747	1786	TFSA	12125.35	0
1748	1787	ISA	2689.29	0
1749	1788	ISA	51.84	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1750	1789	ISA	539.17	0
1751	1789	TFSA	697.53	0
1752	1790	ISA	121.36	0
1753	1791	ISA	0.0	0
1754	1791	TFSA	1529.41	0
1755	1792	ISA	5.34	0
1756	1792	TFSA	451.53	0
1757	1793	ISA	6.14	0
1758	1793	RSP_DEP	293.07	0
1759	1794	ISA	0.0	0
1760	1794	TFSA	2141.03	0
1761	1795	ISA	21.8	0
1762	1796	RSP_DEP	0.0	0
1763	1797	ISA	50757.34	0
1764	1797	TFSA	0.0	0
1765	1798	ISA	1.06	0
1766	1798	TFSA	5269.21	0
1767	1799	ISA	1.1	0
1768	1800	ISA	294.49	0
1769	1801	ISA	3508.77	0
1770	1801	TFSA	2910.14	0
1771	1802	ISA	3.34	0
1772	1802	TFSA	0.0	0
1773	1803	ISA	2.12	0
1774	1803	RSP_DEP	3.56	0
1775	1803	TFSA	3.88	0
1776	1804	ISA	1.54	0
1777	1805	ISA	1.68	0
1778	1806	ISA	0.14	0
1779	1806	TFSA	0.0	0
1780	1807	ISA	93234.47	0
1781	1807	TFSA	5464.65	0
1782	1808	ISA	2631.6	0
1783	1808	TFSA	20684.36	0
1784	1809	ISA	6184.25	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1785	1809	MTG	31447.47	0
1786	1809	TFSA	20744.5	0
1787	1810	ISA	1.17	0
1788	1811	ISA	1601.15	0
1789	1811	TFSA	5323.51	0
1790	1812	ISA	2.48	0
1791	1813	ISA	11754.04	0
1792	1814	ISA	5100.71	0
1793	1815	ISA	0.0	0
1794	1815	RSP_DEP	3688.76	0
1795	1815	TFSA	0.06	0
1796	1816	ISA	116.51	0
1797	1816	TFSA	130.41	0
1798	1817	TFSA	17592.64	0
1799	1818	ISA	1.18	0
1800	1818	MTG	166644.06	0
1801	1818	TFSA	236.48	0
1802	1819	TFSA	10110.2	0
1803	1819	THRIVE	120.83	1
1804	1820	ISA	2.28	0
1805	1821	ISA	0.19	0
1806	1821	TFSA	6237.37	0
1807	1822	ISA	88180.16	0
1808	1823	ISA	0.08	0
1809	1823	RSP_DEP	15601.1	0
1810	1823	TFSA	9783.28	0
1811	1824	ISA	2.75	0
1812	1824	MF	0.0	0
1813	1824	TFSA	0.44	0
1814	1825	ISA	1.6	0
1815	1825	TFSA	5000.91	0
1816	1825	THRIVE	2172.87	1
1817	1826	MTG	117116.57	0
1818	1826	TFSA	5.97	0
1819	1827	ISA	38192.64	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1820	1828	ISA	3.2	0
1821	1828	TFSA	3.71	0
1822	1829	ISA	578.36	0
1823	1830	ISA	3233.18	0
1824	1831	ISA	2.03	0
1825	1831	TFSA	10099.45	0
1826	1832	ISA	22.16	0
1827	1833	ISA	7.48	0
1828	1833	TFSA	10511.55	0
1829	1834	ISA	200.2	0
1830	1835	ISA	4828.18	0
1831	1835	RSP_DEP	3328.53	0
1832	1835	TFSA	15466.48	0
1833	1836	ISA	78712.23	0
1834	1836	TFSA	20830.16	0
1835	1837	ISA	430.12	0
1836	1837	RSP_DEP	760.36	0
1837	1838	RSP_DEP	2239.04	0
1838	1838	TFSA	159.27	0
1839	1839	ISA	12056.64	0
1840	1839	TFSA	0.77	0
1841	1840	ISA	778.15	0
1842	1841	ISA	7972.48	0
1843	1841	TFSA	20669.24	0
1844	1842	ISA	4705.46	0
1845	1843	ISA	0.28	0
1846	1843	RSP_DEP	7049.08	0
1847	1843	TFSA	2891.24	0
1848	1844	ISA	6551.55	0
1849	1845	ISA	302.29	0
1850	1845	TFSA	190.74	0
1851	1846	ISA	0.46	0
1852	1846	TFSA	1314.22	0
1853	1847	MF	36782.88	0
1854	1847	RSP_DEP	2106.55	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1855	1848	TFSA	553.39	0
1856	1849	ISA	205.8	0
1857	1849	RSP_DEP	2580.68	0
1858	1850	ISA	1074.57	0
1859	1851	ISA	9314.06	0
1860	1852	ISA	1050.62	0
1861	1852	TFSA	1646.89	0
1862	1853	ISA	22.87	0
1863	1854	ISA	3.96	0
1864	1855	ISA	700.22	0
1865	1855	RSP_DEP	6003.97	0
1866	1855	TFSA	1203.21	0
1867	1856	ISA	0.01	0
1868	1856	TFSA	0.02	0
1869	1857	ISA	1.33	0
1870	1857	RSP_DEP	2196.22	0
1871	1858	ISA	14904.5	0
1872	1858	TFSA	30834.24	0
1873	1859	ISA	31166.37	0
1874	1860	RSP_DEP	27222.76	0
1875	1860	TFSA	7658.8	0
1876	1861	RSP_DEP	114.89	0
1877	1861	TFSA	3.4	0
1878	1862	ISA	0.23	0
1879	1862	TFSA	3003.65	0
1880	1863	ISA	710.69	0
1881	1864	TFSA	3650.84	0
1882	1865	ISA	10473.49	0
1883	1866	ISA	500.92	0
1884	1867	ISA	17.55	0
1885	1868	ISA	3225.16	0
1886	1868	RSP_DEP	2075.9	0
1887	1869	ISA	769.48	0
1888	1869	THRIVE	39.22	1
1889	1870	ISA	8.44	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1890	1871	ISA	15639.27	0
1891	1872	ISA	8.65	0
1892	1872	MF	208.97	0
1893	1873	ISA	106.45	0
1894	1873	TFSA	14.85	0
1895	1874	ISA	2.66	0
1896	1874	MF	423.89	0
1897	1874	RSP_DEP	590.47	0
1898	1874	TFSA	33.02	0
1899	1875	ISA	31682.87	0
1900	1875	RSP_DEP	519.54	0
1901	1876	ISA	21.46	0
1902	1877	ISA	3197.94	0
1903	1877	TFSA	1134.99	0
1904	1878	ISA	53.97	0
1905	1878	RSP_DEP	730.46	0
1906	1878	TFSA	11.34	0
1907	1879	ISA	1536.46	0
1908	1880	ISA	7.04	0
1909	1880	TFSA	4.54	0
1910	1881	ISA	14966.22	0
1911	1881	TFSA	20734.75	0
1912	1882	ISA	0.26	0
1913	1882	TFSA	0.26	0
1914	1883	ISA	1080.59	0
1915	1884	ISA	2035.3	0
1916	1885	ISA	3013.55	0
1917	1886	ISA	0.17	0
1918	1886	TFSA	1.47	0
1919	1887	ISA	1448.18	0
1920	1888	ISA	1147.49	0
1921	1888	TFSA	15247.49	0
1922	1889	TFSA	1786.82	0
1923	1890	RSP_DEP	17487.89	0
1924	1890	TFSA	12.67	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1925	1891	ISA	65.34	0
1926	1892	ISA	0.1	0
1927	1893	TFSA	9.45	0
1928	1894	ISA	9.42	0
1929	1895	ISA	1.53	0
1930	1896	ISA	51.83	0
1931	1897	ISA	505.13	0
1932	1898	ISA	1.43	0
1933	1898	TFSA	0.03	0
1934	1899	ISA	0.21	0
1935	1899	TFSA	0.37	0
1936	1899	THRIVE	0.0	1
1937	1900	ISA	0.53	0
1938	1900	TFSA	2.4	0
1939	1901	ISA	1.31	0
1940	1901	MTG	211262.64	0
1941	1901	RSP_DEP	136.47	0
1942	1902	ISA	0.05	0
1943	1903	RSP_DEP	7519.23	0
1944	1904	TFSA	10310.48	0
1945	1905	ISA	21.39	0
1946	1906	ISA	2.95	0
1947	1906	TFSA	6.36	0
1948	1907	ISA	5.86	0
1949	1907	TFSA	14.16	0
1950	1908	ISA	0.88	0
1951	1908	TFSA	1.23	0
1952	1909	ISA	122.51	0
1953	1910	ISA	3992.06	0
1954	1910	MTG	247923.36	0
1955	1910	TFSA	8637.32	0
1956	1911	ISA	0.76	0
1957	1911	TFSA	197.21	0
1958	1912	ISA	5.13	0
1959	1913	ISA	51345.12	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1960	1913	TFSA	20858.35	0
1961	1914	RSP_DEP	100.76	0
1962	1914	TFSA	64.74	0
1963	1915	ISA	553.84	0
1964	1915	MF	753.2	0
1965	1915	RSP_DEP	14034.81	0
1966	1916	ISA	4.15	0
1967	1917	ISA	3.51	0
1968	1917	MF	1.83	0
1969	1917	TFSA	8.32	0
1970	1918	ISA	179.95	0
1971	1919	ISA	265.8	0
1972	1920	ISA	6403.55	0
1973	1920	TFSA	421.78	0
1974	1921	ISA	62.04	0
1975	1921	TFSA	602.16	0
1976	1922	ISA	6012.85	0
1977	1922	RSP_DEP	19597.34	0
1978	1922	TFSA	20844.2	0
1979	1923	ISA	13958.48	0
1980	1923	TFSA	19719.33	0
1981	1924	ISA	2061.43	0
1982	1924	TFSA	20860.11	0
1983	1925	ISA	0.43	0
1984	1926	ISA	1299.77	0
1985	1927	ISA	0.23	0
1986	1927	RSP_DEP	8171.92	0
1987	1927	TFSA	1.51	0
1988	1928	ISA	665.1	0
1989	1928	RSP_DEP	0.05	0
1990	1928	TFSA	207.88	0
1991	1929	TFSA	1.11	0
1992	1930	ISA	0.06	0
1993	1931	ISA	0.02	0
1994	1931	THRIVE	20.04	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
1995	1932	ISA	1255.07	0
1996	1933	ISA	2658.68	0
1997	1934	ISA	0.43	0
1998	1934	TFSA	1966.53	0
1999	1935	RSP_DEP	1610.12	0
2000	1935	TFSA	107.25	0
2001	1936	ISA	151.59	0
2002	1937	ISA	0.85	0
2003	1937	RSP_DEP	3860.28	0
2004	1937	TFSA	0.17	0
2005	1938	ISA	6048.11	0
2006	1939	ISA	4231.36	0
2007	1939	TFSA	24.86	0
2008	1940	ISA	7.15	0
2009	1941	ISA	620.12	0
2010	1942	MF	0.0	0
2011	1942	TFSA	0.04	0
2012	1943	ISA	0.23	0
2013	1943	RSP_DEP	1032.19	0
2014	1943	TFSA	52.79	0
2015	1944	RSP_DEP	1.12	0
2016	1945	ISA	4127.45	0
2017	1946	RSP_DEP	10.76	0
2018	1947	ISA	6337.23	0
2019	1948	ISA	32.24	0
2020	1948	TFSA	6297.01	0
2021	1949	ISA	5533.19	0
2022	1949	RSP_DEP	5048.47	0
2023	1949	TFSA	5051.42	0
2024	1950	TFSA	10.75	0
2025	1951	ISA	3076.66	0
2026	1952	GIC	3300.95	0
2027	1952	ISA	4492.33	0
2028	1953	ISA	1249.14	0
2029	1953	TFSA	625.28	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
2030	1954	ISA	8223.48	0
2031	1955	ISA	25190.66	0
2032	1956	ISA	15.13	0
2033	1957	ISA	1.1	0
2034	1958	ISA	0.26	0
2035	1959	MF	511.1	0
2036	1959	TFSA	5.59	0
2037	1960	ISA	14.56	0
2038	1961	ISA	27.7	0
2039	1962	ISA	0.0	0
2040	1962	TFSA	0.33	0
2041	1963	ISA	4.01	0
2042	1963	MF	540.99	0
2043	1963	RSP_DEP	263.89	0
2044	1963	TFSA	7.84	0
2045	1963	THRIVE	15.82	1
2046	1964	ISA	0.46	0
2047	1965	ISA	44.68	0
2048	1966	ISA	5.92	0
2049	1966	TFSA	80.6	0
2050	1967	ISA	0.0	0
2051	1967	TFSA	3.19	0
2052	1968	ISA	0.01	0
2053	1968	TFSA	6.85	0
2054	1969	ISA	0.01	0
2055	1969	TFSA	46.98	0
2056	1970	ISA	0.0	0
2057	1970	TFSA	2.33	0
2058	1971	ISA	27115.91	0
2059	1971	TFSA	20336.59	0
2060	1972	ISA	4.27	0
2061	1972	TFSA	67.89	0
2062	1973	ISA	0.58	0
2063	1974	ISA	5.06	0
2064	1975	ISA	2198.65	0

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
2065	1976	ISA	0.57	0
2066	1977	ISA	0.3	0
2067	1978	ISA	91.46	0
2068	1979	ISA	3723.01	0
2069	1979	TFSA	15280.88	0
2070	1980	ISA	0.02	0
2071	1981	ISA	0.05	0
2072	1981	TFSA	362.61	0
2073	1982	ISA	1.04	0
2074	1982	TFSA	5156.88	0
2075	1983	ISA	0.01	0
2076	1983	TFSA	9312.38	0
2077	1984	ISA	28054.95	0
2078	1984	RSP_DEP	12612.86	0
2079	1984	TFSA	13.53	0
2080	1984	THRIVE	262.18	1
2081	1985	ISA	9.63	0
2082	1985	RSP_DEP	181.94	0
2083	1985	TFSA	2941.8	0
2084	1985	THRIVE	36.24	1
2085	1986	ISA	1.91	0
2086	1986	MTG	394097.96	0
2087	1986	RSP_DEP	22196.06	0
2088	1986	TFSA	2.9	0
2089	1986	THRIVE	123.76	1
2090	1987	ISA	19928.41	0
2091	1987	TFSA	5043.58	0
2092	1987	THRIVE	15.0	1
2093	1988	ISA	936.29	0
2094	1988	THRIVE	265.8	1
2095	1989	GIC	4000.0	0
2096	1989	ISA	13592.15	0
2097	1989	THRIVE	871.96	1
2098	1990	TFSA	9190.09	0
2099	1990	THRIVE	0.2	1

index	CUSTOMER_KEY	PROD_TYPE	BALANCE	THRIVE_1_OTHERS_0
2100	1991	ISA	0.96	0
2101	1991	THRIVE	10.01	1
2102	1992	TFSA	4.21	0
2103	1992	THRIVE	0.56	1
2104	1993	ISA	10.02	0
2105	1993	TFSA	9425.34	0
2106	1993	THRIVE	839.71	1
2107	1994	TFSA	494.62	0
2108	1994	THRIVE	0.0	1
2109	1995	ISA	1.01	0
2110	1995	THRIVE	0.01	1
2111	1996	ISA	12.12	0
2112	1996	TFSA	502.0	0
2113	1996	THRIVE	10.03	1
2114	1997	ISA	3224.05	0
2115	1997	MF	6466.16	0
2116	1997	TFSA	3377.62	0
2117	1997	THRIVE	242.9	1
2118	1998	ISA	3287.75	0
2119	1998	THRIVE	671.29	1
2120	1999	ISA	0.0	0
2121	1999	THRIVE	200.06	1
2122	2000	ISA	43862.82	0
2123	2000	TFSA	20741.54	0
2124	2000	THRIVE	2806.88	1

In [ ]:
```
# BY total count
%%sql
SELECT THRIVE_1_OTHERS_0,
    COUNT(THRIVE_1_OTHERS_0) AS Number_of_Thrive,
    COUNT(THRIVE_1_OTHERS_0)*100/(SELECT COUNT(*) FROM new) AS Percentage
FROM new
GROUP BY THRIVE_1_OTHERS_0
```

In [82]:
```
# BY region with THRIVE
%%sql
SELECT REGION,
    SUM(THRIVE_1_OTHERS_0),
    SUM(THRIVE_1_OTHERS_0)*100/(SELECT SUM(THRIVE_1_OTHERS_0) FROM new) AS Perc
FROM new
GROUP BY REGION
```

```
SELECT REGION,
    COUNT(THRIVE_1_OTHERS_0),
    COUNT(THRIVE_1_OTHERS_0)*100/(SELECT COUNT(*) FROM new) AS Percentage
FROM new
WHERE PROD_TYPE != 'THRIVE'
GROUP BY REGION
```

```
  Input In [82]
    SELECT REGION, SUM(THRIVE_1_OTHERS_0)
           ^
SyntaxError: invalid syntax
```

In [ ]:
```
# BY AGE

SELECT AGE_category,
    COUNT(AGE_category),
    COUNT(AGE_category)*100/(SELECT COUNT(*) FROM New
    WHERE PROD_TYPE == 'THRIVE') AS Percentage
FROM(
    SELECT *,
        CASE WHEN AGE <30 AND AGE >= 0 THEN 'AGE < 30'
        WHEN AGE <60 AND AGE >= 30 THEN '30 < AGE < 60'
        ELSE 'AGE >= 60' END AS 'AGE_category'
    FROM New)
WHERE PROD_TYPE != 'THRIVE'
GROUP BY AGE_category
```

In [ ]:
```
# BY Balance
SELECT Balance_category,
    COUNT(Balance_category),
    COUNT(Balance_category)*100/(SELECT COUNT(*) FROM New) AS Percentage
FROM(
    SELECT *,
    CASE WHEN BALANCE < (SELECT MAX(BALANCE)/4 FROM new) AND BALANCE >= (SELECT

    WHEN BALANCE <(SELECT MAX(BALANCE)*2/4 FROM new) AND BALANCE >= (SELECT MAX

    WHEN BALANCE <(SELECT MAX(BALANCE)*3/4 FROM new) AND BALANCE >= (SELECT MAX

    ELSE 'Balance 4' END AS 'Balance_category'
    FROM New)

WHERE PROD_TYPE != 'THRIVE'
GROUP BY Balance_category
```

In [ ]:

In [ ]:
```
#2.2. What is the Deposit Balance Distribution? Potential target group vs. Cust
```

In [ ]:
```
# Potential target group
SELECT Balance_category,
    COUNT(Balance_category),
    COUNT(Balance_category)*100/(SELECT COUNT(*) FROM New) AS Percentage
FROM(

    SELECT *,
```

```
    CASE WHEN BALANCE < (SELECT MAX(BALANCE)/4 FROM new) AND BALANCE >= (SELECT

    WHEN BALANCE <(SELECT MAX(BALANCE)*2/4 FROM new) AND BALANCE >= (SELECT MAX

    WHEN BALANCE <(SELECT MAX(BALANCE)*3/4 FROM new) AND BALANCE >= (SELECT MAX

    ELSE 'Balance 4' END AS 'Balance_category'
FROM New)

WHERE PROD_TYPE != 'THRIVE'
GROUP BY Balance_category



# Customer base.
SELECT Balance_category,
    COUNT(Balance_category),
    COUNT(Balance_category)*100/(SELECT COUNT(*) FROM New) AS Percentage
FROM(
    SELECT *,
    CASE WHEN BALANCE < (SELECT MAX(BALANCE)/4 FROM new) AND BALANCE >= (SELECT

    WHEN BALANCE <(SELECT MAX(BALANCE)*2/4 FROM new) AND BALANCE >= (SELECT MAX

    WHEN BALANCE <(SELECT MAX(BALANCE)*3/4 FROM new) AND BALANCE >= (SELECT MAX

    ELSE 'Balance 4' END AS 'Balance_category'
    FROM New)

GROUP BY Balance_category
```

In [ ]:

In [ ]:

```
#2.3. Are these high or low Deposit balance customers?
```

In [ ]:

```
# BY Balance
SELECT Balance_category,
    COUNT(Balance_category),
    COUNT(Balance_category)*100/(SELECT COUNT(*) FROM New) AS Percentage
FROM(

    SELECT *,
    CASE WHEN BALANCE < (SELECT MAX(BALANCE)/2 FROM new) AND BALANCE >= (SELECT

    ELSE 'High Balance ' END AS 'Balance_category'
    FROM New)

WHERE PROD_TYPE != 'THRIVE'
GROUP BY Balance_category
```

In [ ]:

In [ ]:

```
#2.4. How long have these clients been with the bank (year)?
```

In [11]:

```
import pandas as pd
import sqlite3
data = pd.read_excel('Customers.xls')
cnn = sqlite3.connect('juypter_sql_tutorial.db')
```

```
# data.to_sql('df', cnn)
%load_ext sql
%sql sqlite:///juypter_sql_tutorial.db
```

In [101…

```
%%sql

SELECT (SELECT max(STRFTIME('%Y', CLIENT_DATE)) FROM df) - STRFTIME('%Y', CLIEN
FROM df
```

```
 * sqlite:///juypter_sql_tutorial.db
Done.
```

Out[101]:

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In [144…

```
%%sql

CREATE TABLE tenure AS
SELECT year_of_joining,
    COUNT(year_of_joining) AS count
FROM(
    SELECT (SELECT max(STRFTIME('%Y', CLIENT_DATE)) FROM df) - STRFTIME('%Y', C
    FROM df) AS sub
GROUP BY year_of_joining
```

```
 * sqlite:///juypter_sql_tutorial.db
Done.
```

Out[144]:

```
[]
```

In [149…

```
%%sql

SELECT *, (count*100/(SELECT sum(count) FROM tenure)) AS percentage FROM tenure
```

```
 * sqlite:///juypter_sql_tutorial.db
Done.
```

Out[149]:

year_of_joining	count	percentage
0	19	1
1	22	2
2	31	3
3	47	4
4	316	31
5	69	6
6	1	0
7	1	0
8	2	0
9	31	3
10	61	6
11	100	10
12	94	9
13	88	8
14	85	8
15	33	3

In [ ]:

In [ ]:
```
#2.5. On average, how many products do they have? And what other products do th
```

In [ ]:
```
SELECT CUSTOMER_KEY,
    COUNT(PROD_TYPE)
FROM new
GROUP BY CUSTOMER_KEY
```

In [209…
```
SELECT sum(prod_count)/COUNT(CUSTOMER_KEY) AS AVG
FROM(
    SELECT CUSTOMER_KEY,
    COUNT(PROD_TYPE) AS prod_count
    FROM new
    GROUP BY CUSTOMER_KEY)


SELECT PROD_TYPE, COUNT(PROD_TYPE) AS prod_count FROM new
GROUP BY PROD_TYPE
```

```
 * sqlite:///juypter_sql_tutorial.db
```

In [ ]:

In [ ]:
```
#2.6. Any other insights that would add value to the initiative?
```

In [ ]:
```
SELECT PROD_TYPE,
    AGE_category,
    COUNT(AGE_category) AS Count_of_AGE
```

```
FROM(
    SELECT *,
        CASE WHEN AGE <30 AND AGE >= 0 THEN 'AGE < 30'
        WHEN AGE <60 AND AGE >= 30 THEN '30 < AGE < 60'
        ELSE 'AGE >= 60' END AS 'AGE_category'
    FROM new)
WHERE PROD_TYPE != 'THRIVE'
GROUP BY AGE_category, PROD_TYPE

SELECT PROD_TYPE,
    AGE_category,
    COUNT(AGE_category) AS Count_of_AGE
FROM(
    SELECT *,
        CASE WHEN AGE <30 AND AGE >= 0 THEN 'AGE < 30'
        WHEN AGE <60 AND AGE >= 30 THEN '30 < AGE < 60'
        ELSE 'AGE >= 60' END AS 'AGE_category'
FROM new)
WHERE PROD_TYPE == 'THRIVE'
GROUP BY AGE_category, PROD_TYPE





SELECT PROD_TYPE,
    Region,
    COUNT(Region) AS Count_of_Region
FROM new
GROUP BY Region, PROD_TYPE
ORDER BY COUNT(Region) DESC
```

In [ ]:

```
CREATE TABLE new1 AS
SELECT *,
    CASE WHEN NUM_OF_CONTACT <10 AND NUM_OF_CONTACT >= 0 THEN 'NUM_OF_CONTACT <
    WHEN NUM_OF_CONTACT <20 AND NUM_OF_CONTACT >= 10 THEN '10 < NUM_OF_CONTACT
    ELSE 'NUM_OF_CONTACT >= 20' END AS 'CONT_category'
FROM new


SELECT PROD_TYPE,
    CONT_category,
    COUNT(CONT_category)
FROM new1
GROUP BY PROD_TYPE, CONT_category
ORDER BY COUNT(CONT_category) DESC


SELECT PROD_TYPE,
    CONT_category,
    COUNT(CONT_category)
FROM new1
WHERE PROD_TYPE != 'THRIVE'
GROUP BY PROD_TYPE, CONT_category
ORDER BY COUNT(CONT_category) DESC


SELECT PROD_TYPE,
    EmailPermission,
```

```
    COUNT(EmailPermission)
FROM new1
WHERE PROD_TYPE != 'THRIVE'
GROUP BY PROD_TYPE, EmailPermission
ORDER BY COUNT(EmailPermission) DESC


SELECT PROD_TYPE,
    MailPermission,
    COUNT(MailPermission)
FROM new1
WHERE PROD_TYPE != 'THRIVE'
GROUP BY PROD_TYPE, MailPermission
ORDER BY COUNT(MailPermission) DESC
```

In [ ]:

```
UPDATE new1
SET NUM_OF_TXN ='0'
WHERE NUM_OF_TXN =='.'

CREATE TABLE new2 AS
SELECT *,
    CASE WHEN NUM_OF_TXN <10 AND NUM_OF_TXN >= 0 THEN 'NUM_OF_TXN < 10'
    WHEN NUM_OF_TXN <20 AND NUM_OF_TXN >= 10 THEN '10 < NUM_OF_TXN < 20'
    ELSE 'NUM_OF_TXN >= 20' END AS 'TXN_category'
FROM new1
```

In [ ]:

In [ ]:

```
#III. Campaign Development and Management
```

In [ ]:

```
# YY, YN  finish email first
SELECT ROUND(0.05*COUNT(CUSTOMER_KEY),2) AS Total_cost_email
FROM(
    SELECT DISTINCT CUSTOMER_KEY,
    EmailPermission,
    MailPermission
    FROM new1
    WHERE CUSTOMER_KEY NOT IN(
        SELECT CUSTOMER_KEY
        FROM new1
        WHERE PROD_TYPE == 'THRIVE')
    AND EmailPermission == 'Y' )
```

In [ ]:

```
# YY->x, NY  then mail
SELECT ROUND(1.75*COUNT(CUSTOMER_KEY),2) AS Total_cost_mail
FROM(
    SELECT DISTINCT CUSTOMER_KEY,
    EmailPermission,
    MailPermission
    FROM new1
    WHERE CUSTOMER_KEY NOT IN(SELECT CUSTOMER_KEY
                              FROM new1
                              WHERE PROD_TYPE == 'THRIVE')
    AND EmailPermission == 'N' AND MailPermission == 'Y'
) AS t1
```