System Requirement Specifications

Sunville Properties is a Colorado based property consultants who have appointed their agesnts across Major Cities across the globe.They have sub-Coompanies which take care the buiness in different countries and are placed in the countries from where they operate from. The Company currently has been using multiple forms of data storage and want to streamline their working using an application ,which can help them seamlessly navigate via different forms of storage. Also the company seeks some insights into the current data and also going further in future. So it has requested specific modules to be introduced in the system.

The Expected modules are :
1) An Visual Interface to add the data inst each of their tables.A login authentication is mandatory for anyone to be able to modify the data.

2) The company needs an order look up (i.e. search) based on the following criteria,

a) Order number

b) Order Date

c) Customer code

kindly note :the company might use either one or all of them together at a time.

3) Generate a report that highlights the balance amounts for all orders in descending order .Do mention the name and code of the agent handling the order. This information needs to be updated in the database .

4) Which is the country with maximum number of registered customer and what is the collective payment amount and outstanding amount for all these customers collctively.

The company needs the following insights
1) On selection of the year, system should help them get the following

a) The total property area sold vs total property are leased in Sq-M only.

b) Of the years 2017,2018,2019- which year got maximum leased area in CA and WS countries.

c) What are the Agent codes of all the agents who have got deals in ‘OWNED’ categories across the years.

d) For the city of chillwalk, which agent hs got the maximum deals in leased form.

e) Compare the performance of all agents based on the area leased and owned for the years 2017,2018 and 2019. Who has been the best performer?

f) What is the amount of property area sold for the month of july for all the years.

g) The Company seeks a time series analysis report of the orders received.

Company also seeks any interesting insights or patterns that can help make better business decision. Analysts viewpoint is welcomed by sunville properties.

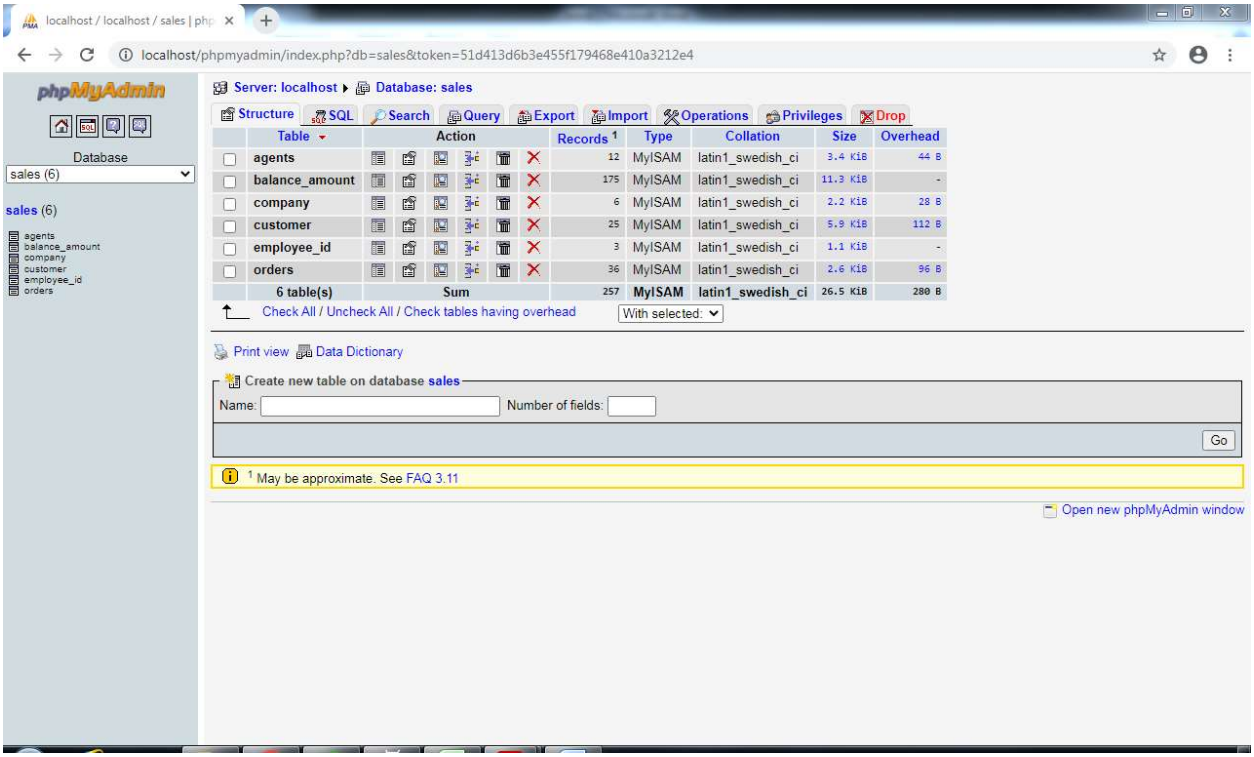
Technology used

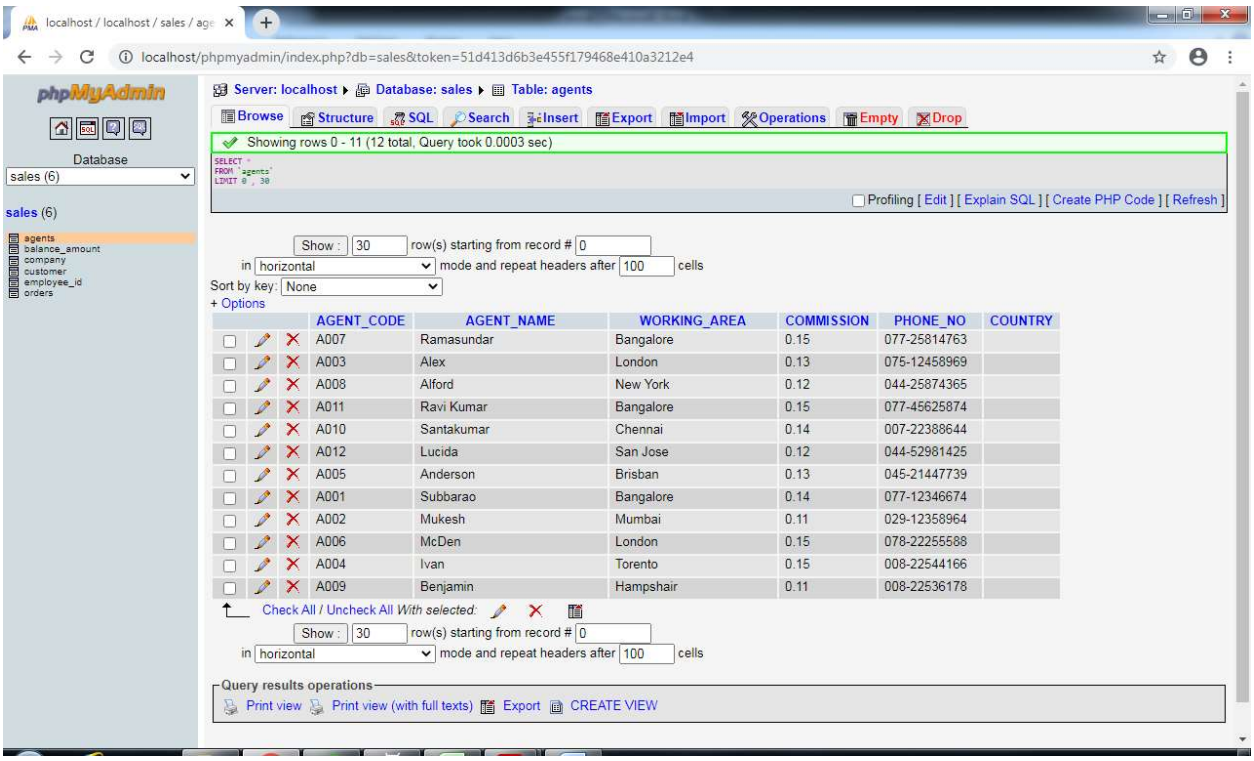
The project is completely build using python.

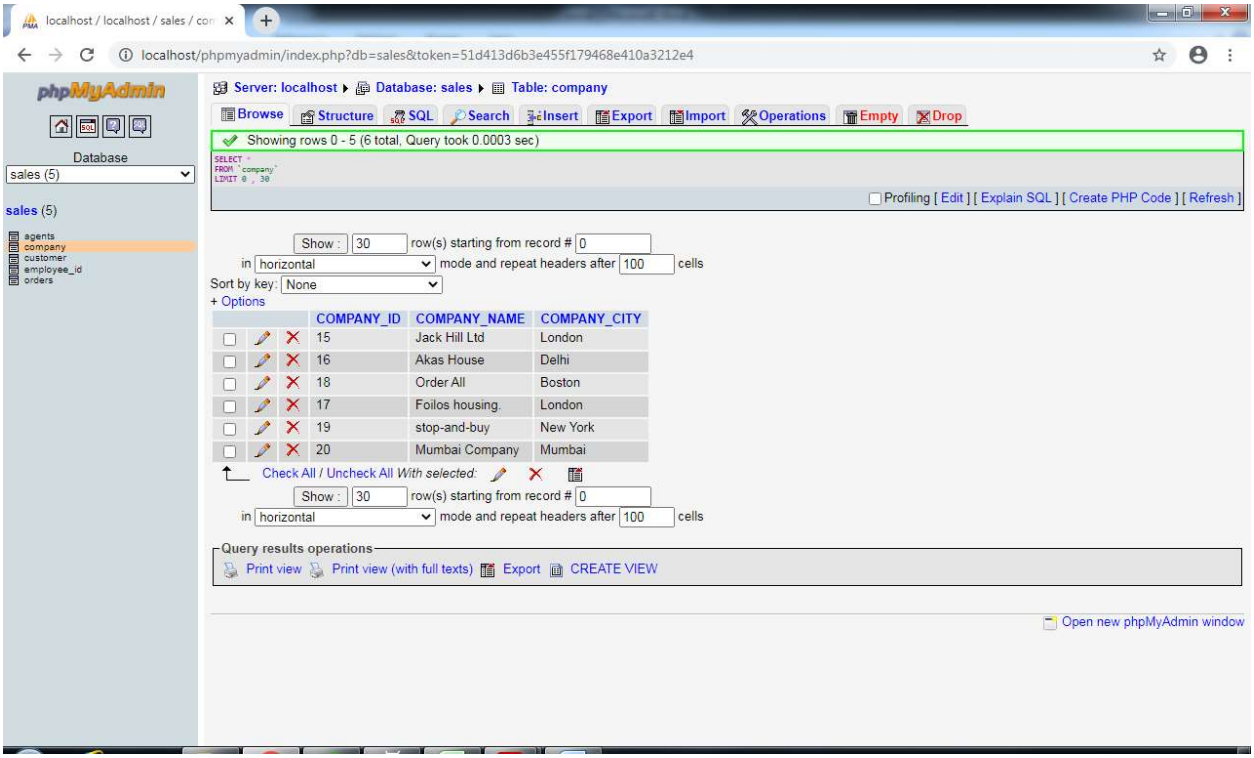
Libraries used:

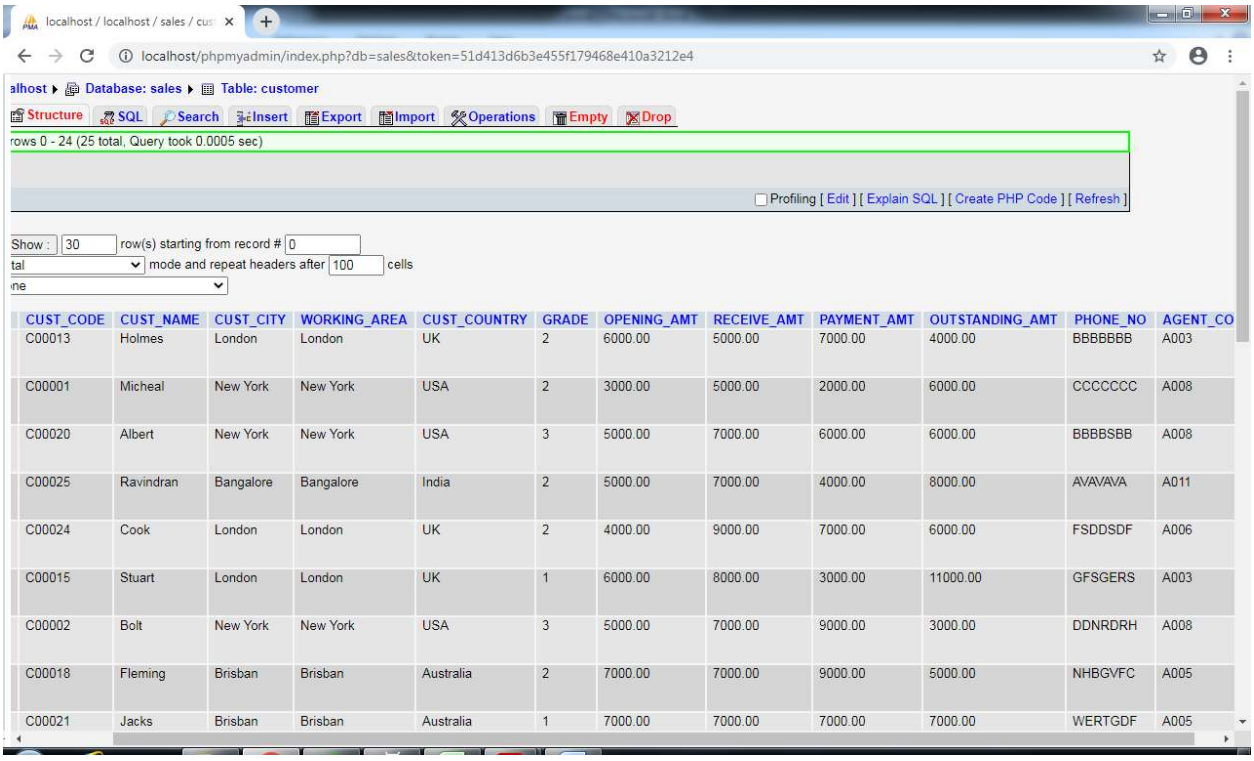
- tkinter,tkinter.ttk are used to make a GUI based project.
- tkinter.messagebox is used to show messages to user.
- PIL to insert Image on GUI.
- re library is used for validations of entries.
- pandas library is used to make dataframe which are used to make graphs.
- Library matplotlib is used to plot graphs.
- Module FigureCanvasTkAgg from matplotlib.backends.backend_tkagg library is used to embed graphs on the GUI.
- Module Table, TableModel from pandastable library is used to show tables on GUI.
- Library pymysql is used to make connections with the sql database.

Data Provided by the client:

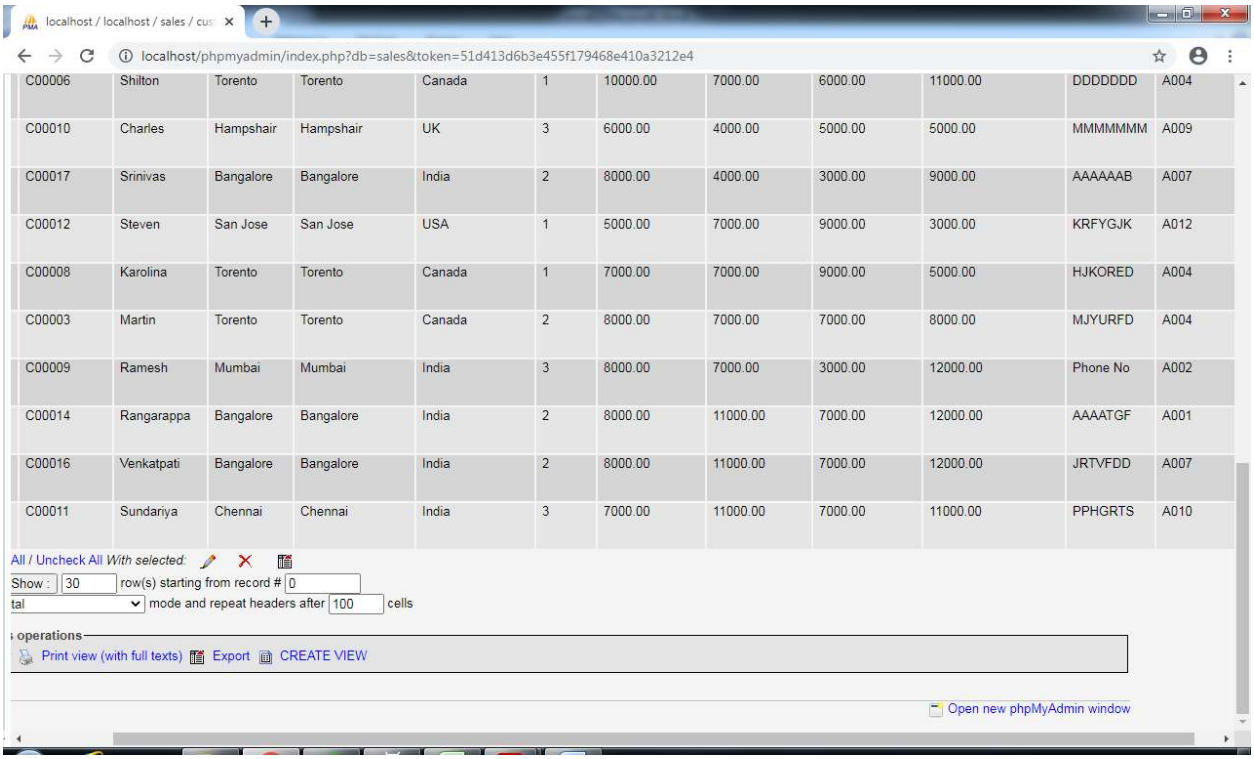





localhost / localhost / sales / com
localhost/phpmyadmin/index.php?db=sales&token=51d413d6b3e455f179468e410a3212e4
phpMyAdmin
Database
sales (5)
sales (5)
agents
company
customer
employee_id
orders
Server: localhost ▸ Database: sales ▸ Table: company
Browse Structure SQL Search Insert Export Import Operations Empty Drop
Showing rows 0 - 5 (6 total, Query took 0.0003 sec)
SELECT *
FROM `company`
LIMIT 0 , 30
Profiling [Edit] [Explain SQL] [Create PHP Code] [Refresh]
Show : 30 row(s) starting from record # 0
in horizontal mode and repeat headers after 100 cells
Sort by key: None
+ Options
COMPANY_ID COMPANY_NAME COMPANY_CITY
15 Jack Hill Ltd London
16 Akas House Delhi
18 Order All Boston
17 Foilos housing. London
19 stop-and-buy New York
20 Mumbai Company Mumbai
Check All / Uncheck All With selected:
Show : 30 row(s) starting from record # 0
in horizontal mode and repeat headers after 100 cells
Query results operations
Print view Print view (with full texts) Export CREATE VIEW
Open new phpMyAdmin window


localhost / localhost / sales / cus
localhost/phpmyadmin/index.php?db=sales&token=51d413d6b3e455f179468e410a3212e4
alhost ▸ Database: sales ▸ Table: customer
Structure SQL Search Insert Export Import Operations Empty Drop
rows 0 - 24 (25 total, Query took 0.0005 sec)
Profiling [Edit] [Explain SQL] [Create PHP Code] [Refresh]
Show : 30 row(s) starting from record # 0
tal mode and repeat headers after 100 cells
ne
CUST_CODE CUST_NAME CUST_CITY WORKING_AREA CUST_COUNTRY GRADE OPENING_AMT RECEIVE_AMT PAYMENT_AMT OUTSTANDING_AMT PHONE_NO AGENT_CO
C00013 Holmes London London UK 2 6000.00 5000.00 7000.00 4000.00 BBBBBBB A003
C00001 Micheal New York New York USA 2 3000.00 5000.00 2000.00 6000.00 CCCCCCC A008
C00020 Albert New York New York USA 3 5000.00 7000.00 6000.00 6000.00 BBBBSBB A008
C00025 Ravindran Bangalore Bangalore India 2 5000.00 7000.00 4000.00 8000.00 AVAVAVA A011
C00024 Cook London London UK 2 4000.00 9000.00 7000.00 6000.00 FSDDSDF A006
C00015 Stuart London London UK 1 6000.00 8000.00 3000.00 11000.00 GFSGERS A003
C00002 Bolt New York New York USA 3 5000.00 7000.00 9000.00 3000.00 DDNRDRH A008
C00018 Fleming Brisban Brisban Australia 2 7000.00 7000.00 9000.00 5000.00 NHBGVFC A005
C00021 Jacks Brisban Brisban Australia 1 7000.00 7000.00 7000.00 7000.00 WERTGDF A005

C00019	Yearannaidu	Chennai	Chennai	India	1	8000.00	7000.00	7000.00	8000.00	ZZZZBFV	A010
C00005	Sasikant	Mumbai	Mumbai	India	1	7000.00	11000.00	7000.00	11000.00	147-25896312	A002
C00007	Ramanathan	Chennai	Chennai	India	1	7000.00	11000.00	9000.00	9000.00	GHRDWSD	A010
C00022	Avinash	Mumbai	Mumbai	India	2	7000.00	11000.00	9000.00	9000.00	113-12345678	A002
C00004	Winston	Brisban	Brisban	Australia	1	5000.00	8000.00	7000.00	6000.00	AAAAAAA	A005
C00023	Karl	London	London	UK	0	4000.00	6000.00	7000.00	3000.00	AAAABAA	A006
C00006	Shilton	Torento	Torento	Canada	1	10000.00	7000.00	6000.00	11000.00	DDDDDDD	A004
C00010	Charles	Hampshair	Hampshair	UK	3	6000.00	4000.00	5000.00	5000.00	MMMMMMM	A009
C00017	Srinivas	Bangalore	Bangalore	India	2	8000.00	4000.00	3000.00	9000.00	AAAAAAB	A007
C00012	Steven	San Jose	San Jose	USA	1	5000.00	7000.00	9000.00	3000.00	KRFYGJK	A012
C00008	Karolina	Torento	Torento	Canada	1	7000.00	7000.00	9000.00	5000.00	HJKORED	A004
C00003	Martin	Torento	Torento	Canada	2	8000.00	7000.00	7000.00	8000.00	MJYURFD	A004
C00009	Ramesh	Mumbai	Mumbai	India	3	8000.00	7000.00	3000.00	12000.00	Phone No	A002
C00014	Rangarappa	Bangalore	Bangalore	India	2	8000.00	11000.00	7000.00	12000.00	AAAATGF	A001



C00006	Shilton	Torento	Torento	Canada	1	10000.00	7000.00	6000.00	11000.00	DDDDDDD	A004
C00010	Charles	Hampshair	Hampshair	UK	3	6000.00	4000.00	5000.00	5000.00	MMMMMMM	A009
C00017	Srinivas	Bangalore	Bangalore	India	2	8000.00	4000.00	3000.00	9000.00	AAAAAAB	A007
C00012	Steven	San Jose	San Jose	USA	1	5000.00	7000.00	9000.00	3000.00	KRFYGJK	A012
C00008	Karolina	Torento	Torento	Canada	1	7000.00	7000.00	9000.00	5000.00	HJKORED	A004
C00003	Martin	Torento	Torento	Canada	2	8000.00	7000.00	7000.00	8000.00	MJYURFD	A004
C00009	Ramesh	Mumbai	Mumbai	India	3	8000.00	7000.00	3000.00	12000.00	Phone No	A002
C00014	Rangarappa	Bangalore	Bangalore	India	2	8000.00	11000.00	7000.00	12000.00	AAAATGF	A001
C00016	Venkatpati	Bangalore	Bangalore	India	2	8000.00	11000.00	7000.00	12000.00	JRTVFDD	A007
C00011	Sundariya	Chennai	Chennai	India	3	7000.00	11000.00	7000.00	11000.00	PPHGRTS	A010

All / Uncheck All *With selected:*

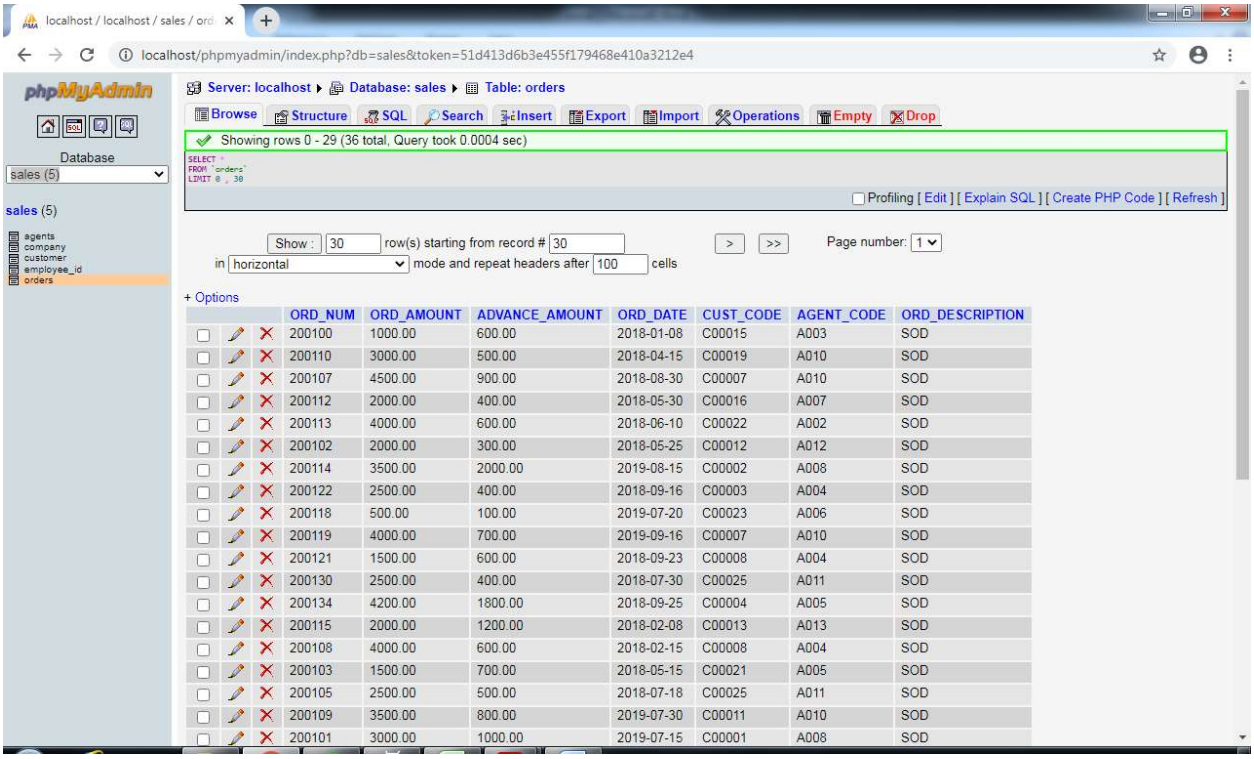
Show : 30 row(s) starting from record # 0

tal mode and repeat headers after 100 cells

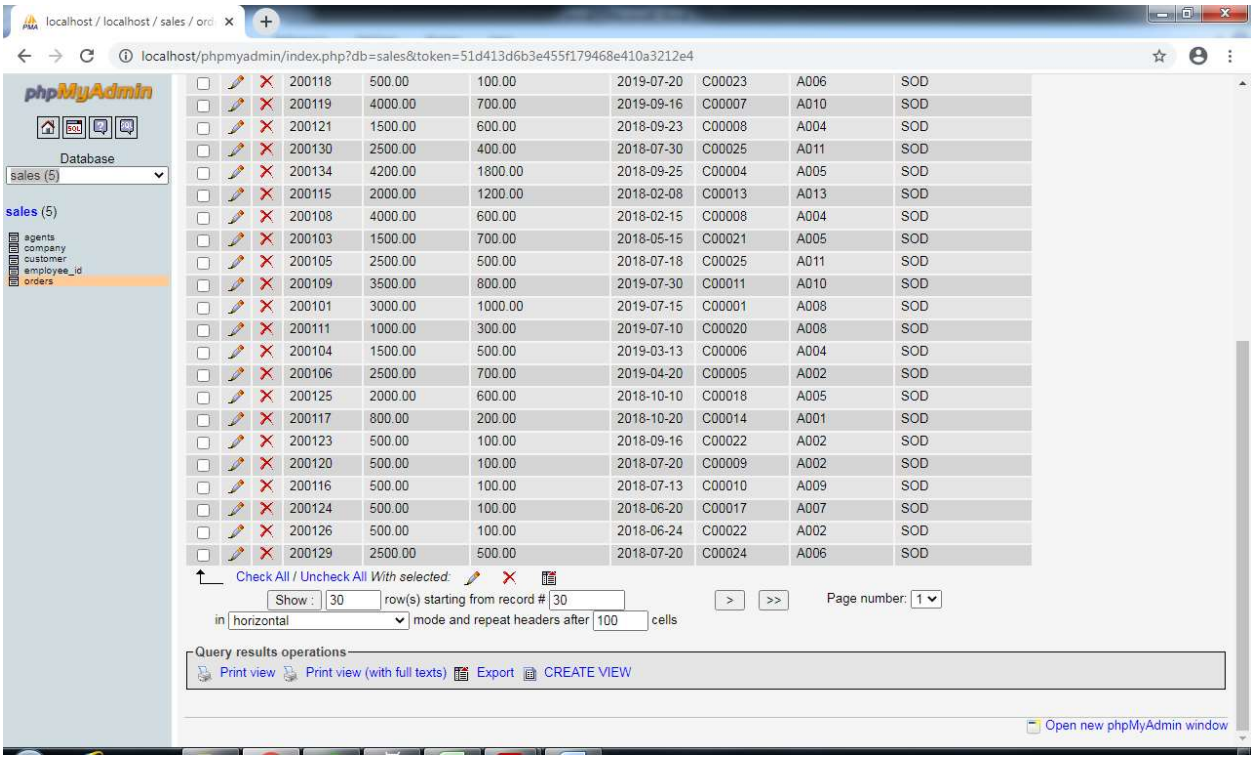
operations

Print view (with full texts) Export CREATE VIEW

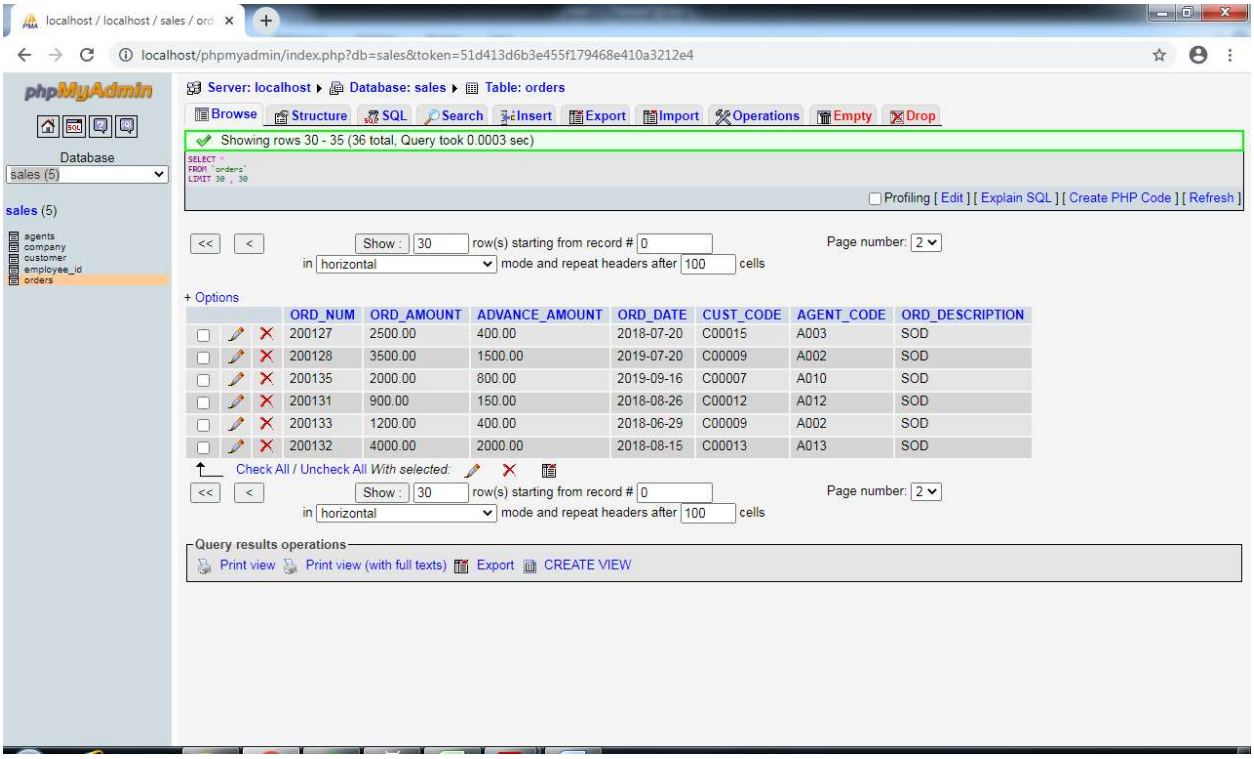
Open new phpMyAdmin window



ORD_NUM	ORD_AMOUNT	ADVANCE_AMOUNT	ORD_DATE	CUST_CODE	AGENT_CODE	ORD_DESCRIPTION
200100	1000.00	600.00	2018-01-08	C00015	A003	SOD
200110	3000.00	500.00	2018-04-15	C00019	A010	SOD
200107	4500.00	900.00	2018-08-30	C00007	A010	SOD
200112	2000.00	400.00	2018-05-30	C00016	A007	SOD
200113	4000.00	600.00	2018-06-10	C00022	A002	SOD
200102	2000.00	300.00	2018-05-25	C00012	A012	SOD
200114	3500.00	2000.00	2019-08-15	C00002	A008	SOD
200122	2500.00	400.00	2018-09-16	C00003	A004	SOD
200118	500.00	100.00	2019-07-20	C00023	A006	SOD
200119	4000.00	700.00	2019-09-16	C00007	A010	SOD
200121	1500.00	600.00	2018-09-23	C00008	A004	SOD
200130	2500.00	400.00	2018-07-30	C00025	A011	SOD
200134	4200.00	1800.00	2018-09-25	C00004	A005	SOD
200115	2000.00	1200.00	2018-02-08	C00013	A013	SOD
200108	4000.00	600.00	2018-02-15	C00008	A004	SOD
200103	1500.00	700.00	2018-05-15	C00021	A005	SOD
200105	2500.00	500.00	2018-07-18	C00025	A011	SOD
200109	3500.00	800.00	2019-07-30	C00011	A010	SOD
200101	3000.00	1000.00	2019-07-15	C00001	A008	SOD



200118	500.00	100.00	2019-07-20	C00023	A006	SOD
200119	4000.00	700.00	2019-09-16	C00007	A010	SOD
200121	1500.00	600.00	2018-09-23	C00008	A004	SOD
200130	2500.00	400.00	2018-07-30	C00025	A011	SOD
200134	4200.00	1800.00	2018-09-25	C00004	A005	SOD
200115	2000.00	1200.00	2018-02-08	C00013	A013	SOD
200108	4000.00	600.00	2018-02-15	C00008	A004	SOD
200103	1500.00	700.00	2018-05-15	C00021	A005	SOD
200105	2500.00	500.00	2018-07-18	C00025	A011	SOD
200109	3500.00	800.00	2019-07-30	C00011	A010	SOD
200101	3000.00	1000.00	2019-07-15	C00001	A008	SOD
200111	1000.00	300.00	2019-07-10	C00020	A008	SOD
200104	1500.00	500.00	2019-03-13	C00006	A004	SOD
200106	2500.00	700.00	2019-04-20	C00005	A002	SOD
200125	2000.00	600.00	2018-10-10	C00018	A005	SOD
200117	800.00	200.00	2018-10-20	C00014	A001	SOD
200123	500.00	100.00	2018-09-16	C00022	A002	SOD
200120	500.00	100.00	2018-07-20	C00009	A002	SOD
200116	500.00	100.00	2018-07-13	C00010	A009	SOD
200124	500.00	100.00	2018-06-20	C00017	A007	SOD
200126	500.00	100.00	2018-06-24	C00022	A002	SOD
200129	2500.00	500.00	2018-07-20	C00024	A006	SOD



The database given is named sales and has following tables:

1) agents
2) company
3) customer
4) orders

agent table contains following columns:

1) AGENT_CODE
2) AGENT_NAME
3) WORKING_AREA
4) COMMISSION
5) PHONE_NO

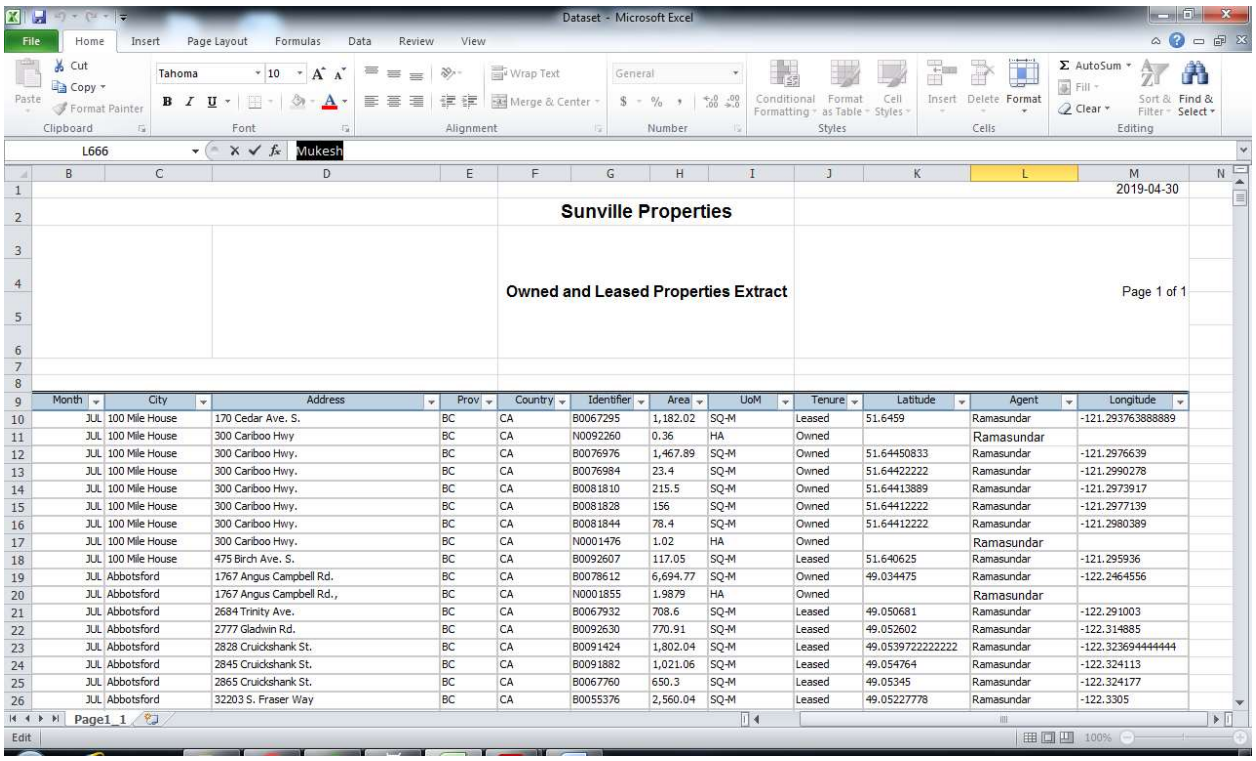
company table contains following columns:

1) COMPANY_ID
2) COMPANY_NAME
3) COMPANY_CITY
1) CUST_CODE
2) CUST_NAME
3) CUST_CITY
4) WORKING_AREA
5) CUST_COUNTRY
6) GRADE
7) OPENING_AMT
8) RECIVE_AMT
9) PAYMENT_AMT
10) OUTSTANGING_AMT
11) PHONE_NO
12) AGENT_CODE

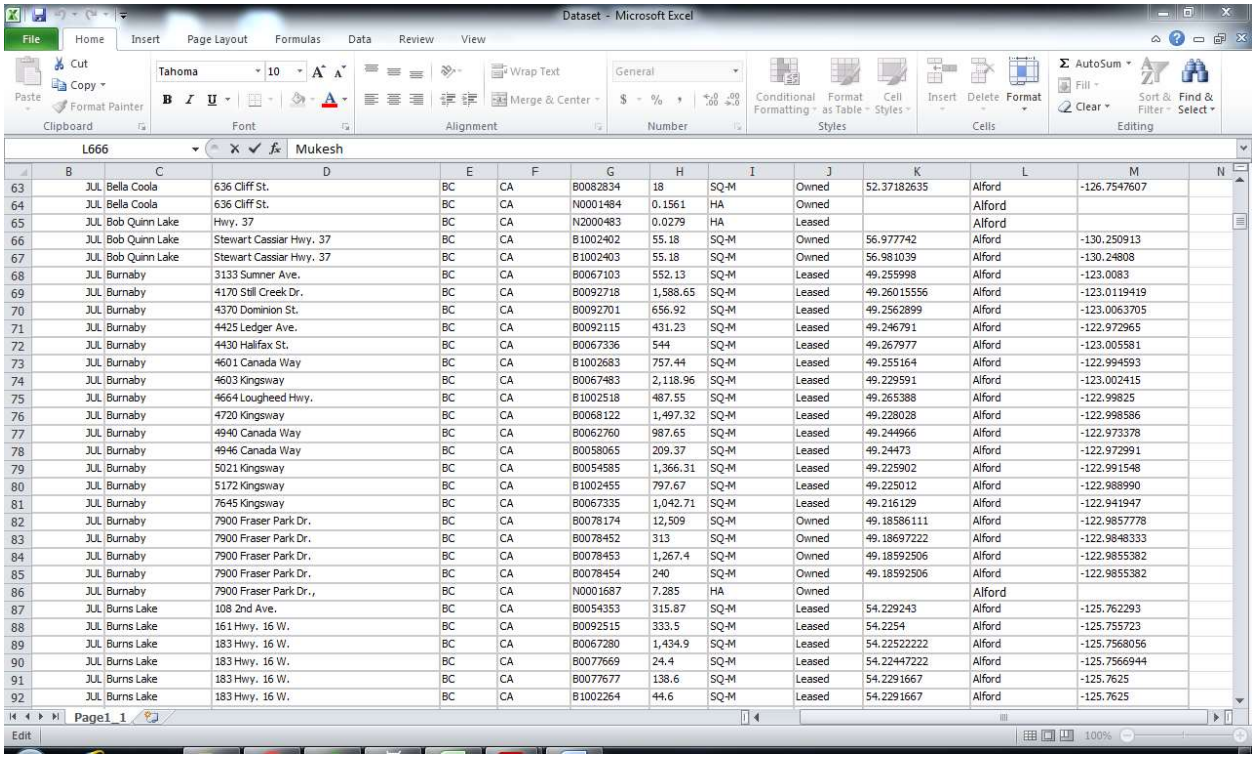
orders table contains following columns:

1) ORD_NUM
2) ORD_AMOUNT
3) ADVANCE_AMOUNT
4) ORD_DATE
5) CUST_CODE
6) AGENT_CODE
7) ORD_DESCRIPTION

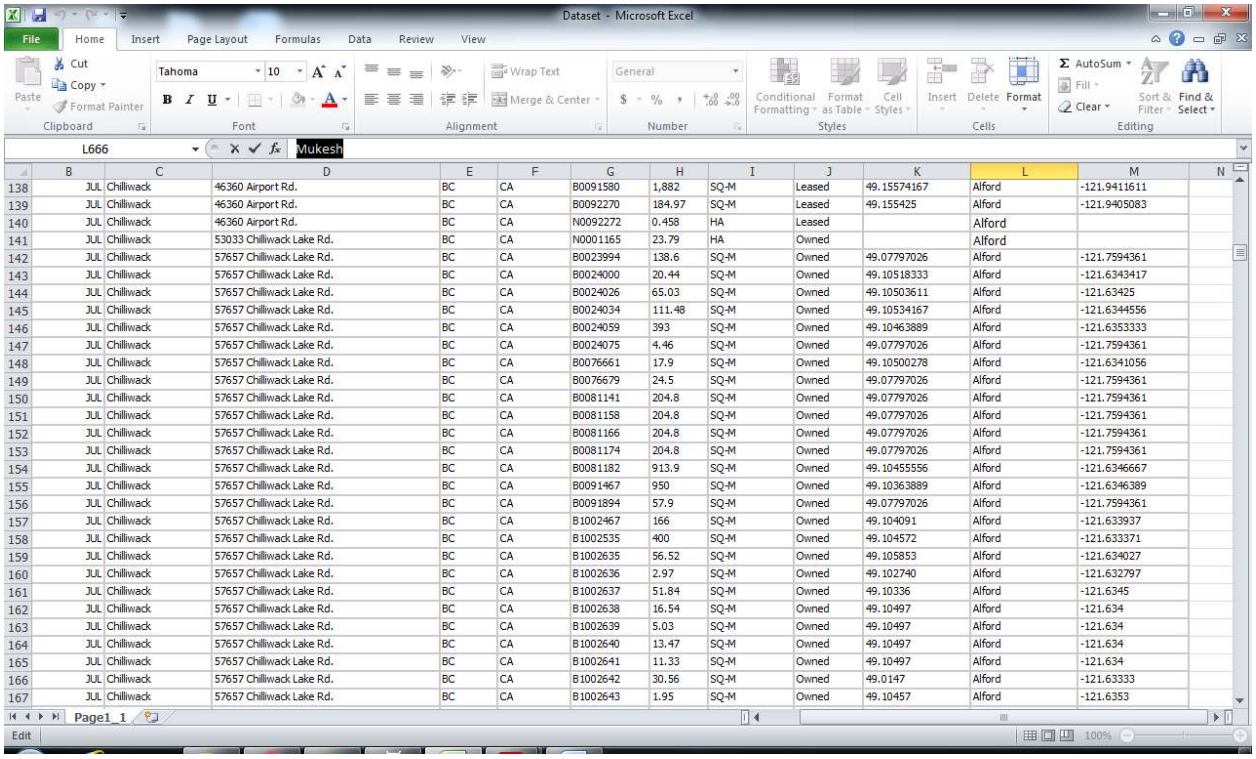
The database software that I am using is WampServer.



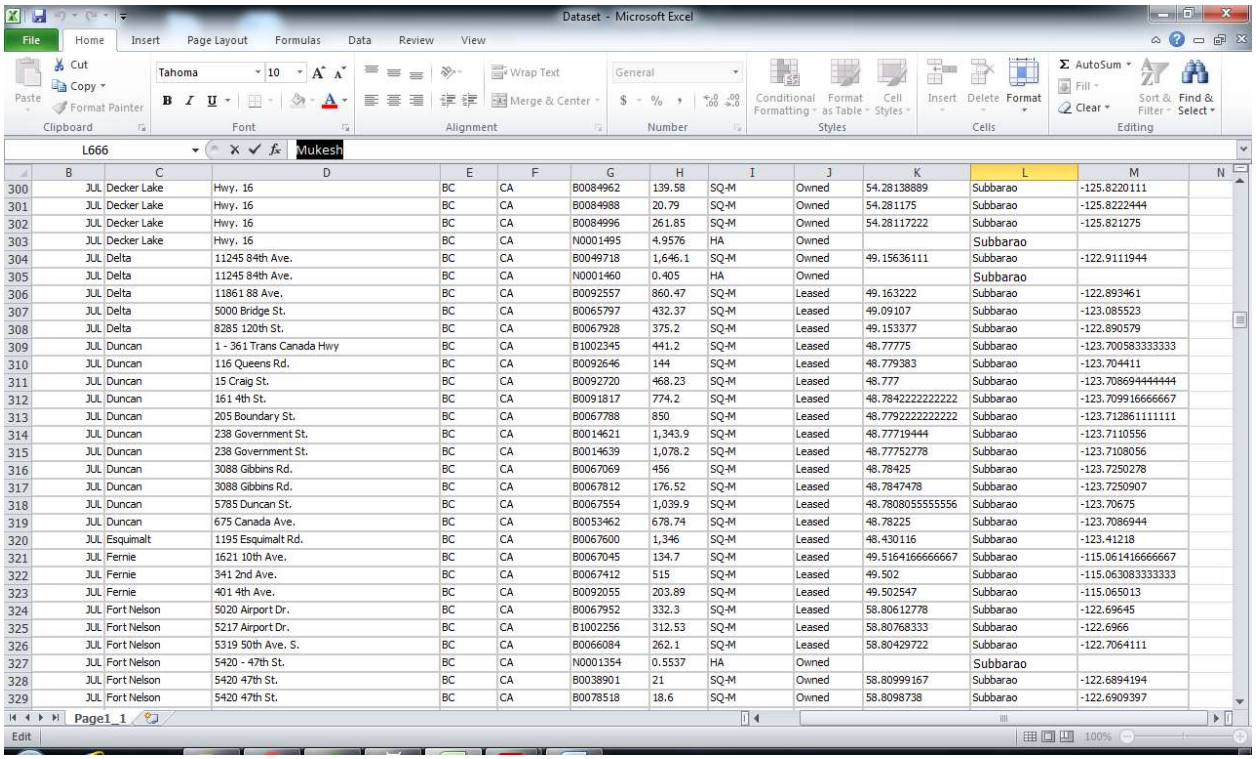
Month	City	Address	Prov	Country	Identifier	Area	UoM	Tenure	Latitude	Agent	Longitude
JUL	100 Mile House	170 Cedar Ave. S.	BC	CA	B0067295	1,182.02	SQ-M	Leased	51.6459	Ramasundar	-121.293763888889
JUL	100 Mile House	300 Cariboo Hwy	BC	CA	N0092260	0.36	HA	Owned		Ramasundar	
JUL	100 Mile House	300 Cariboo Hwy.	BC	CA	B0076976	1,467.89	SQ-M	Owned	51.64450833	Ramasundar	-121.2976639
JUL	100 Mile House	300 Cariboo Hwy.	BC	CA	B0076984	23.4	SQ-M	Owned	51.64422222	Ramasundar	-121.2990278
JUL	100 Mile House	300 Cariboo Hwy.	BC	CA	B0081810	215.5	SQ-M	Owned	51.64413889	Ramasundar	-121.2973917
JUL	100 Mile House	300 Cariboo Hwy.	BC	CA	B0081828	156	SQ-M	Owned	51.64412222	Ramasundar	-121.2977139
JUL	100 Mile House	300 Cariboo Hwy.	BC	CA	B0081844	78.4	SQ-M	Owned	51.64412222	Ramasundar	-121.2980389
JUL	100 Mile House	300 Cariboo Hwy.	BC	CA	N0001476	1.02	HA	Owned		Ramasundar	
JUL	100 Mile House	475 Birch Ave. S.	BC	CA	B0092607	117.05	SQ-M	Leased	51.640625	Ramasundar	-121.295936
JUL	Abbotsford	1767 Angus Campbell Rd.	BC	CA	B0078612	6,694.77	SQ-M	Owned	49.034475	Ramasundar	-122.2464556
JUL	Abbotsford	1767 Angus Campbell Rd.,	BC	CA	N0001855	1.9879	HA	Owned		Ramasundar	
JUL	Abbotsford	2684 Trinity Ave.	BC	CA	B0067932	708.6	SQ-M	Leased	49.050681	Ramasundar	-122.291003
JUL	Abbotsford	2777 Gladwin Rd.	BC	CA	B0092630	770.91	SQ-M	Leased	49.052602	Ramasundar	-122.314885
JUL	Abbotsford	2828 Cruickshank St.	BC	CA	B0091424	1,802.04	SQ-M	Leased	49.0539722222222	Ramasundar	-122.323694444444
JUL	Abbotsford	2845 Cruickshank St.	BC	CA	B0091882	1,021.06	SQ-M	Leased	49.054764	Ramasundar	-122.324113
JUL	Abbotsford	2865 Cruickshank St.	BC	CA	B0067760	650.3	SQ-M	Leased	49.05345	Ramasundar	-122.324177
JUL	Abbotsford	32203 S. Fraser Way	BC	CA	B0055376	2,560.04	SQ-M	Leased	49.05227778	Ramasundar	-122.3305



JUL	Bella Coola	636 Cliff St.	BC	CA	B0082834	18	SQ-M	Owned	52.37182635	Alford	-126.7547607
JUL	Bella Coola	636 Cliff St.	BC	CA	N0001484	0.1561	HA	Owned		Alford	
JUL	Bob Quinn Lake	Hwy. 37	BC	CA	N2000483	0.0279	HA	Leased		Alford	
JUL	Bob Quinn Lake	Stewart Cassiar Hwy. 37	BC	CA	B1002402	55.18	SQ-M	Owned	56.977742	Alford	-130.250913
JUL	Bob Quinn Lake	Stewart Cassiar Hwy. 37	BC	CA	B1002403	55.18	SQ-M	Owned	56.981039	Alford	-130.24808
JUL	Burnaby	3133 Sumner Ave.	BC	CA	B0067103	552.13	SQ-M	Leased	49.255998	Alford	-123.0083
JUL	Burnaby	4170 Still Creek Dr.	BC	CA	B0092718	1,588.65	SQ-M	Leased	49.26015556	Alford	-123.0119419
JUL	Burnaby	4370 Dominion St.	BC	CA	B0092701	656.92	SQ-M	Leased	49.2562899	Alford	-123.0063705
JUL	Burnaby	4425 Ledger Ave.	BC	CA	B0092115	431.23	SQ-M	Leased	49.246791	Alford	-122.972965
JUL	Burnaby	4430 Halifax St.	BC	CA	B0067336	544	SQ-M	Leased	49.267977	Alford	-123.005581
JUL	Burnaby	4601 Canada Way	BC	CA	B1002683	757.44	SQ-M	Leased	49.255164	Alford	-122.994593
JUL	Burnaby	4603 Kingsway	BC	CA	B0067483	2,118.96	SQ-M	Leased	49.229591	Alford	-123.002415
JUL	Burnaby	4664 Lougheed Hwy.	BC	CA	B1002518	487.55	SQ-M	Leased	49.265388	Alford	-122.99825
JUL	Burnaby	4720 Kingsway	BC	CA	B0068122	1,497.32	SQ-M	Leased	49.228028	Alford	-122.998586
JUL	Burnaby	4940 Canada Way	BC	CA	B0062760	987.65	SQ-M	Leased	49.244966	Alford	-122.973378
JUL	Burnaby	4946 Canada Way	BC	CA	B0058065	209.37	SQ-M	Leased	49.24473	Alford	-122.972991
JUL	Burnaby	5021 Kingsway	BC	CA	B0054585	1,366.31	SQ-M	Leased	49.225902	Alford	-122.991548
JUL	Burnaby	5172 Kingsway	BC	CA	B1002455	797.67	SQ-M	Leased	49.225012	Alford	-122.988990
JUL	Burnaby	7645 Kingsway	BC	CA	B0067335	1,042.71	SQ-M	Leased	49.216129	Alford	-122.941947
JUL	Burnaby	7900 Fraser Park Dr.	BC	CA	B0078174	12,509	SQ-M	Owned	49.18586111	Alford	-122.9857778
JUL	Burnaby	7900 Fraser Park Dr.	BC	CA	B0078452	313	SQ-M	Owned	49.18697222	Alford	-122.9848333
JUL	Burnaby	7900 Fraser Park Dr.	BC	CA	B0078453	1,267.4	SQ-M	Owned	49.18592506	Alford	-122.9855382
JUL	Burnaby	7900 Fraser Park Dr.	BC	CA	B0078454	240	SQ-M	Owned	49.18592506	Alford	-122.9855382
JUL	Burnaby	7900 Fraser Park Dr.,	BC	CA	N0001687	7.285	HA	Owned		Alford	
JUL	Burns Lake	108 2nd Ave.	BC	CA	B0054353	315.87	SQ-M	Leased	54.229243	Alford	-125.762293
JUL	Burns Lake	161 Hwy. 16 W.	BC	CA	B0092515	333.5	SQ-M	Leased	54.2254	Alford	-125.755723
JUL	Burns Lake	183 Hwy. 16 W.	BC	CA	B0067280	1,434.9	SQ-M	Leased	54.22522222	Alford	-125.7568056
JUL	Burns Lake	183 Hwy. 16 W.	BC	CA	B0077669	24.4	SQ-M	Leased	54.22447222	Alford	-125.7566944
JUL	Burns Lake	183 Hwy. 16 W.	BC	CA	B0077677	138.6	SQ-M	Leased	54.2291667	Alford	-125.7625
JUL	Burns Lake	183 Hwy. 16 W.	BC	CA	B1002264	44.6	SQ-M	Leased	54.2291667	Alford	-125.7625



	B	C	D	E	F	G	H	I	J	K	L	M	N
138	JUL	Chilliwack	46360 Airport Rd.	BC	CA	B0091580	1,882	SQ-M	Leased	49.15574167	Alford	-121.9411611	
139	JUL	Chilliwack	46360 Airport Rd.	BC	CA	B0092270	184.97	SQ-M	Leased	49.155425	Alford	-121.9405083	
140	JUL	Chilliwack	46360 Airport Rd.	BC	CA	N0092272	0.458	HA	Leased		Alford		
141	JUL	Chilliwack	53033 Chilliwack Lake Rd.	BC	CA	N0001165	23.79	HA	Owned		Alford		
142	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0023994	138.6	SQ-M	Owned	49.07797026	Alford	-121.7594361	
143	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0024000	20.44	SQ-M	Owned	49.10518333	Alford	-121.6343417	
144	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0024026	65.03	SQ-M	Owned	49.10503611	Alford	-121.63425	
145	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0024034	111.48	SQ-M	Owned	49.10534167	Alford	-121.6344556	
146	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0024059	393	SQ-M	Owned	49.10463889	Alford	-121.6353333	
147	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0024075	4.46	SQ-M	Owned	49.07797026	Alford	-121.7594361	
148	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0076661	17.9	SQ-M	Owned	49.10500278	Alford	-121.6341056	
149	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0076679	24.5	SQ-M	Owned	49.07797026	Alford	-121.7594361	
150	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0081141	204.8	SQ-M	Owned	49.07797026	Alford	-121.7594361	
151	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0081158	204.8	SQ-M	Owned	49.07797026	Alford	-121.7594361	
152	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0081166	204.8	SQ-M	Owned	49.07797026	Alford	-121.7594361	
153	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0081174	204.8	SQ-M	Owned	49.07797026	Alford	-121.7594361	
154	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0081182	913.9	SQ-M	Owned	49.10455556	Alford	-121.6346667	
155	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0091467	950	SQ-M	Owned	49.10363889	Alford	-121.6346389	
156	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B0091894	57.9	SQ-M	Owned	49.07797026	Alford	-121.7594361	
157	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002467	166	SQ-M	Owned	49.104091	Alford	-121.633937	
158	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002535	400	SQ-M	Owned	49.104572	Alford	-121.633371	
159	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002635	56.52	SQ-M	Owned	49.105853	Alford	-121.634027	
160	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002636	2.97	SQ-M	Owned	49.102740	Alford	-121.632797	
161	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002637	51.84	SQ-M	Owned	49.10336	Alford	-121.6345	
162	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002638	16.54	SQ-M	Owned	49.10497	Alford	-121.634	
163	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002639	5.03	SQ-M	Owned	49.10497	Alford	-121.634	
164	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002640	13.47	SQ-M	Owned	49.10497	Alford	-121.634	
165	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002641	11.33	SQ-M	Owned	49.10497	Alford	-121.634	
166	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002642	30.56	SQ-M	Owned	49.0147	Alford	-121.63333	
167	JUL	Chilliwack	57657 Chilliwack Lake Rd.	BC	CA	B1002643	1.95	SQ-M	Owned	49.10457	Alford	-121.6353	

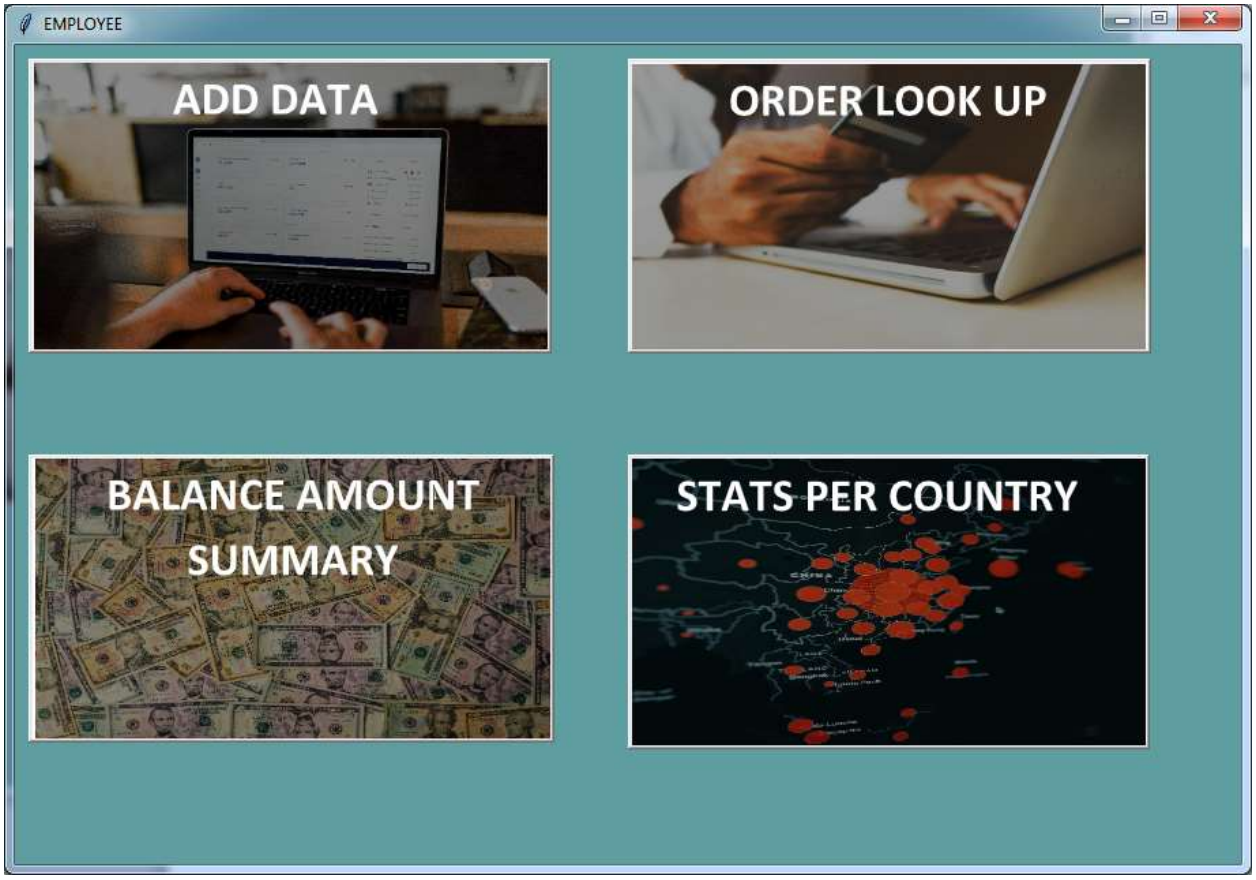


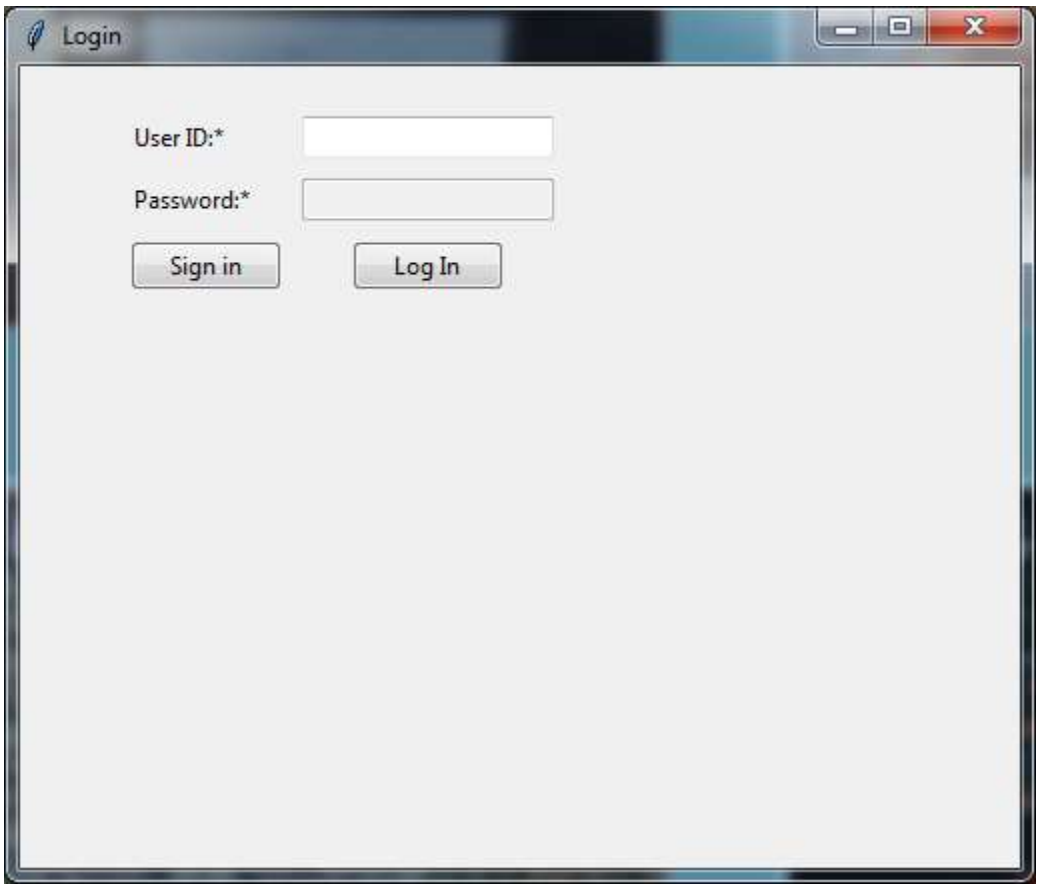
	B	C	D	E	F	G	H	I	J	K	L	M	N
300	JUL	Decker Lake	Hwy. 16	BC	CA	B0084962	139.58	SQ-M	Owned	54.28138889	Subbarao	-125.8220111	
301	JUL	Decker Lake	Hwy. 16	BC	CA	B0084988	20.79	SQ-M	Owned	54.281175	Subbarao	-125.8222444	
302	JUL	Decker Lake	Hwy. 16	BC	CA	B0084996	261.85	SQ-M	Owned	54.28117222	Subbarao	-125.821275	
303	JUL	Decker Lake	Hwy. 16	BC	CA	N0001495	4.9576	HA	Owned		Subbarao		
304	JUL	Delta	11245 84th Ave.	BC	CA	B0049718	1,646.1	SQ-M	Owned	49.15636111	Subbarao	-122.9111944	
305	JUL	Delta	11245 84th Ave.	BC	CA	N0001460	0.405	HA	Owned		Subbarao		
306	JUL	Delta	11861 88 Ave.	BC	CA	B0092557	860.47	SQ-M	Leased	49.163222	Subbarao	-122.893461	
307	JUL	Delta	5000 Bridge St.	BC	CA	B0065797	432.37	SQ-M	Leased	49.09107	Subbarao	-123.085523	
308	JUL	Delta	8285 120th St.	BC	CA	B0067928	375.2	SQ-M	Leased	49.153377	Subbarao	-122.890579	
309	JUL	Duncan	1 - 361 Trans Canada Hwy	BC	CA	B1002345	441.2	SQ-M	Leased	48.77775	Subbarao	-123.700583333333	
310	JUL	Duncan	116 Queens Rd.	BC	CA	B0092646	144	SQ-M	Leased	48.779383	Subbarao	-123.704411	
311	JUL	Duncan	15 Craig St.	BC	CA	B0092720	468.23	SQ-M	Leased	48.777	Subbarao	-123.708694444444	
312	JUL	Duncan	161 4th St.	BC	CA	B0091817	774.2	SQ-M	Leased	48.7842222222222	Subbarao	-123.709916666667	
313	JUL	Duncan	205 Boundary St.	BC	CA	B0067788	850	SQ-M	Leased	48.7792222222222	Subbarao	-123.712861111111	
314	JUL	Duncan	238 Government St.	BC	CA	B0014621	1,343.9	SQ-M	Leased	48.77719444	Subbarao	-123.7110556	
315	JUL	Duncan	238 Government St.	BC	CA	B0014639	1,078.2	SQ-M	Leased	48.77752778	Subbarao	-123.7108056	
316	JUL	Duncan	3088 Gibbins Rd.	BC	CA	B0067069	456	SQ-M	Leased	48.78425	Subbarao	-123.7250278	
317	JUL	Duncan	3088 Gibbins Rd.	BC	CA	B0067812	176.52	SQ-M	Leased	48.7847478	Subbarao	-123.7250907	
318	JUL	Duncan	5785 Duncan St.	BC	CA	B0067554	1,039.9	SQ-M	Leased	48.7808055555556	Subbarao	-123.70675	
319	JUL	Duncan	675 Canada Ave.	BC	CA	B0053462	678.74	SQ-M	Leased	48.78225	Subbarao	-123.7086944	
320	JUL	Esquimalt	1195 Esquimalt Rd.	BC	CA	B0067600	1,346	SQ-M	Leased	48.430116	Subbarao	-123.41218	
321	JUL	Fernie	1621 10th Ave.	BC	CA	B0067045	134.7	SQ-M	Leased	49.5164166666667	Subbarao	-115.061416666667	
322	JUL	Fernie	341 2nd Ave.	BC	CA	B0067412	515	SQ-M	Leased	49.502	Subbarao	-115.063083333333	
323	JUL	Fernie	401 4th Ave.	BC	CA	B0092055	203.89	SQ-M	Leased	49.502547	Subbarao	-115.065013	
324	JUL	Fort Nelson	5020 Airport Dr.	BC	CA	B0067952	332.3	SQ-M	Leased	58.80612778	Subbarao	-122.69645	
325	JUL	Fort Nelson	5217 Airport Dr.	BC	CA	B1002256	312.53	SQ-M	Leased	58.80768333	Subbarao	-122.6966	
326	JUL	Fort Nelson	5319 50th Ave. S.	BC	CA	B0066084	262.1	SQ-M	Leased	58.80429722	Subbarao	-122.7064111	
327	JUL	Fort Nelson	5420 - 47th St.	BC	CA	N0001354	0.5537	HA	Owned		Subbarao		
328	JUL	Fort Nelson	5420 47th St.	BC	CA	B0038901	21	SQ-M	Owned	58.80999167	Subbarao	-122.6894194	
329	JUL	Fort Nelson	5420 47th St.	BC	CA	B0078518	18.6	SQ-M	Owned	58.8098738	Subbarao	-122.6909397	

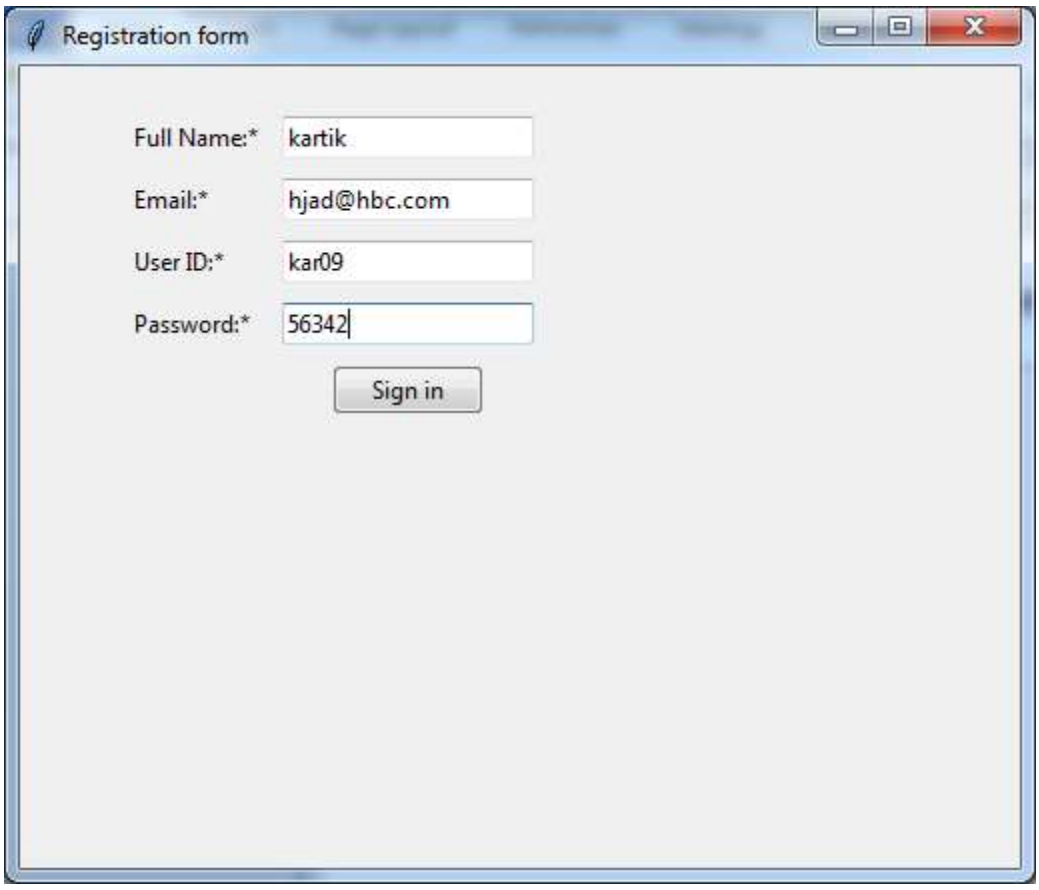
The Dataset given contains following columns:

1) Year:2019,2018,2017,2020
2) Month : JUL
3) City
4) Address
5) Prov :BC
6) Country: CA or WS
7) Identifier
8) Area
9) UOM: SQ-M or HA
10) Tenure: Owned or Leased
11) Latitude
12) Agent
13) Longitude

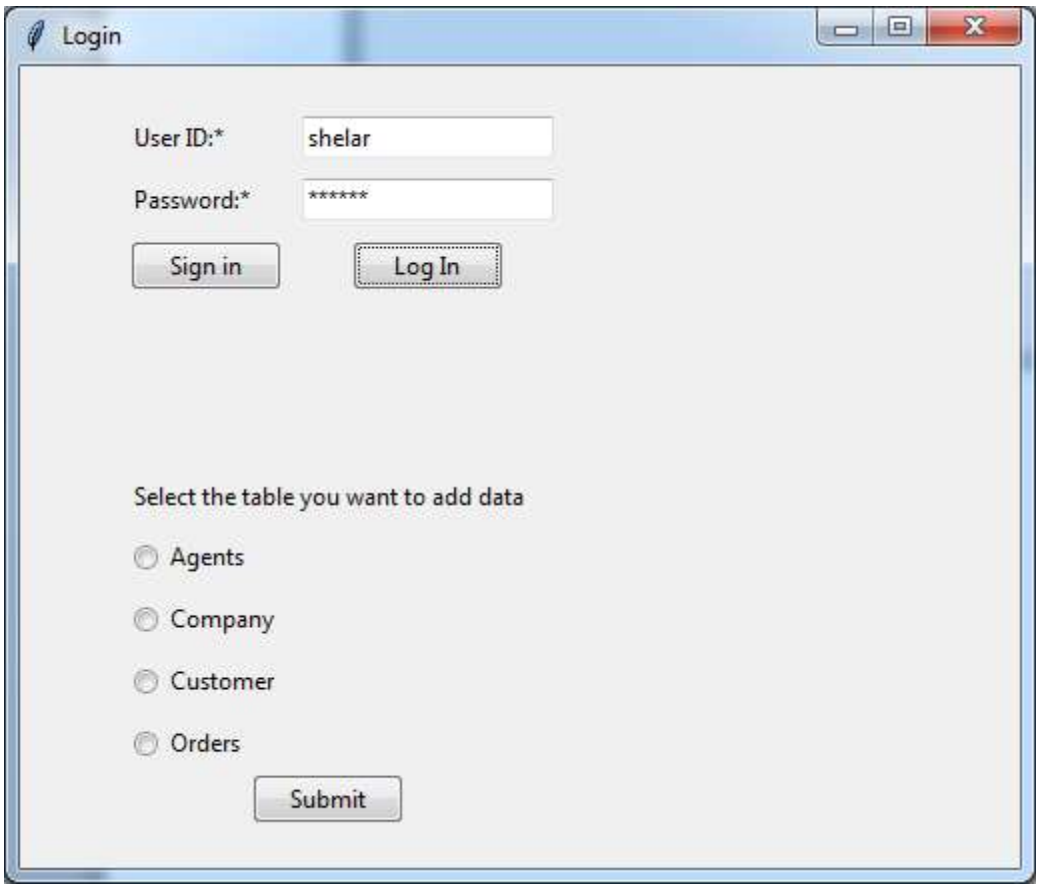
Screenshots:

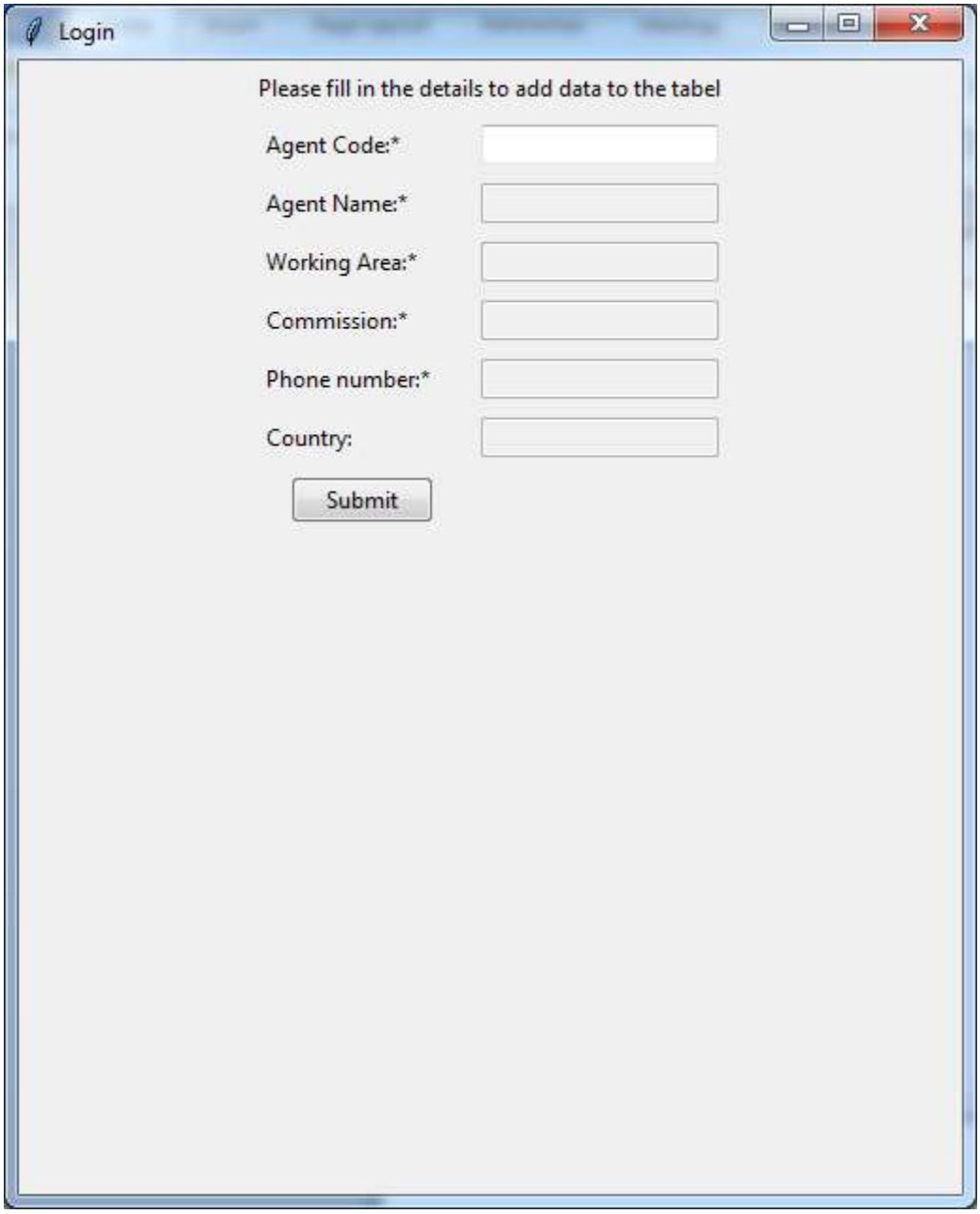

EMPLOYEE
ADD DATA
ORDER LOOK UP
BALANCE AMOUNT
SUMMARY
STATS PER COUNTRY

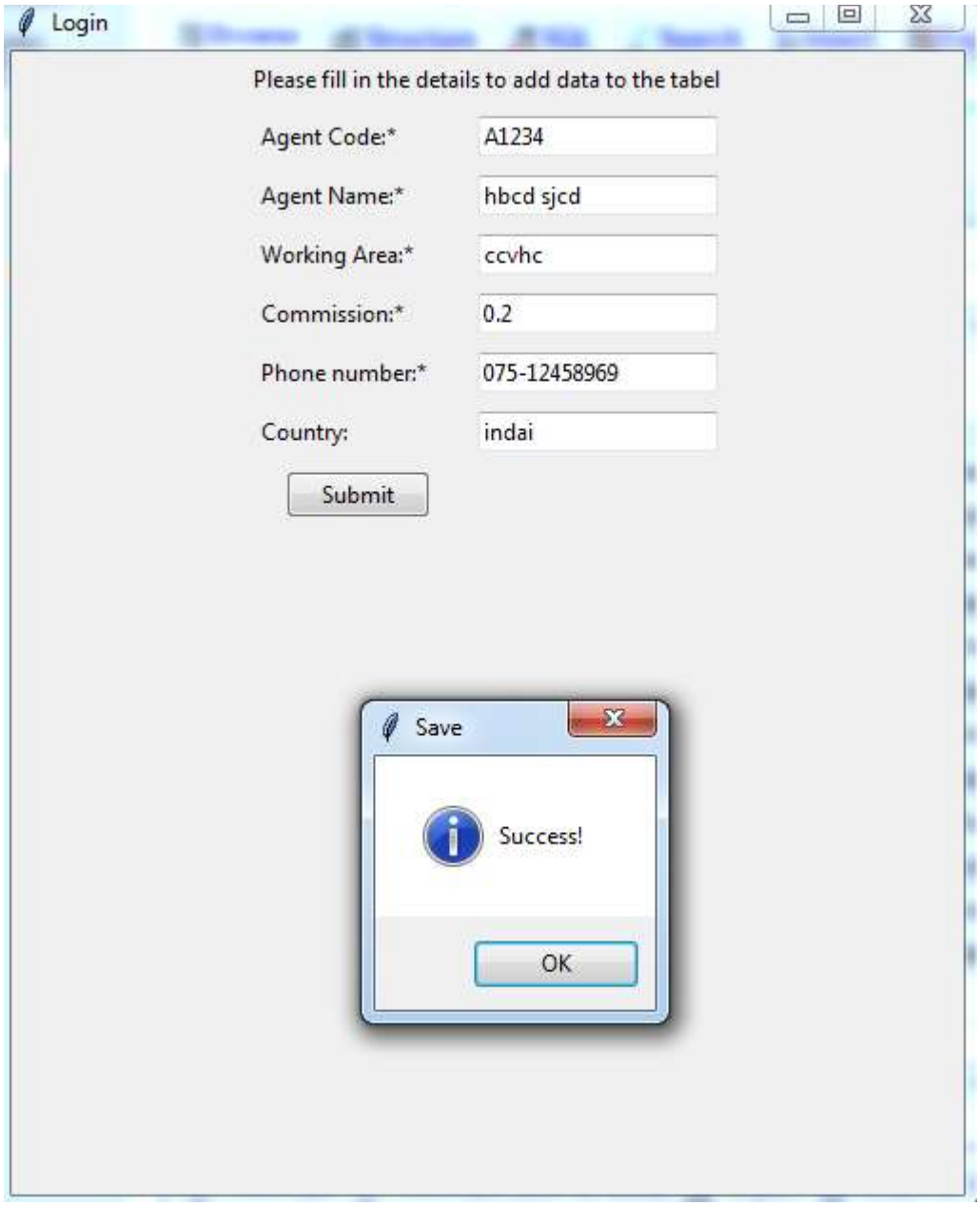

Login
User ID:*
Password:*
Sign in
Log In

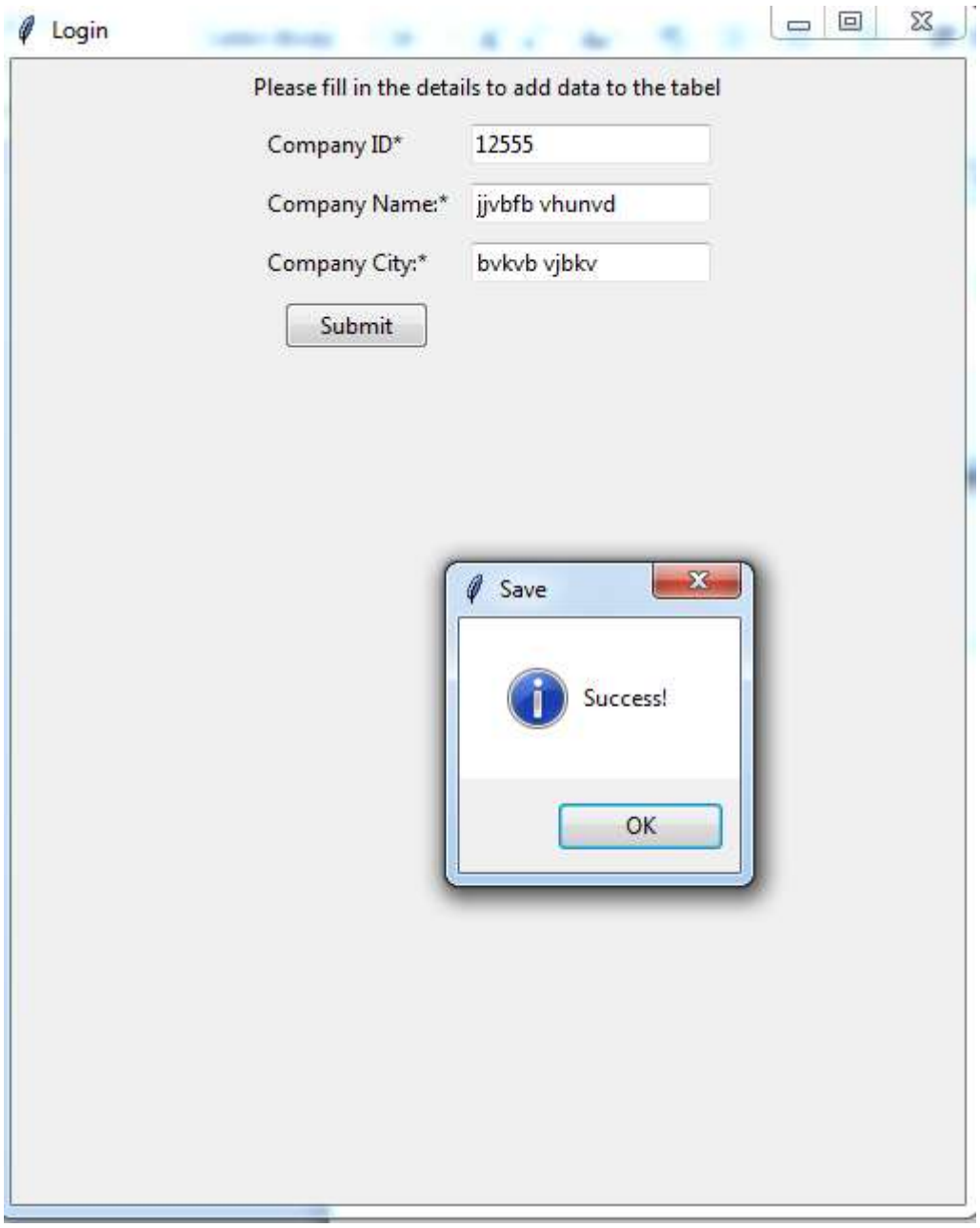

Registration form
Full Name:*
kartik
Email:*
hjad@hbc.com
User ID:*
kar09
Password:*
56342
Sign in

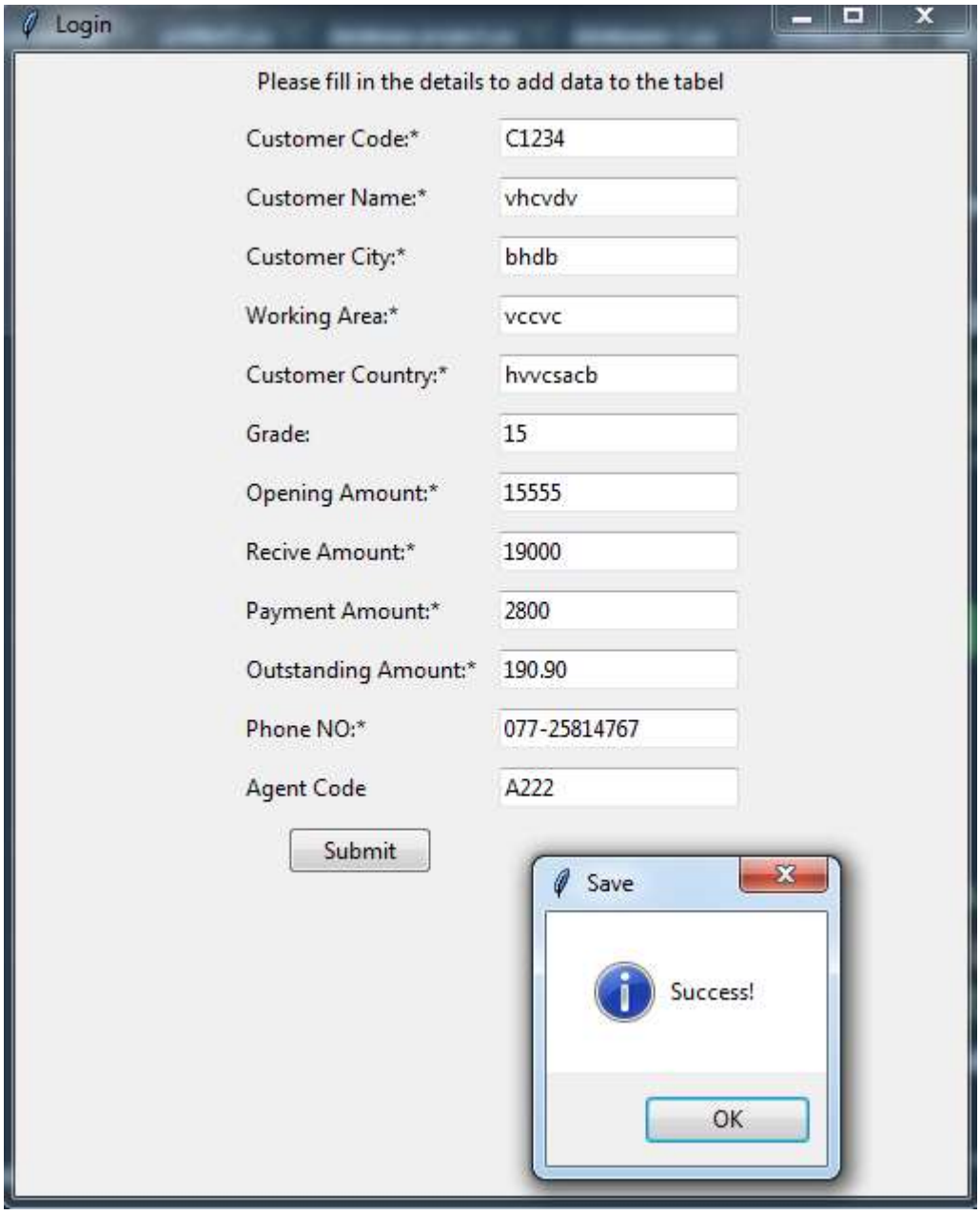
Save
Success!
OK

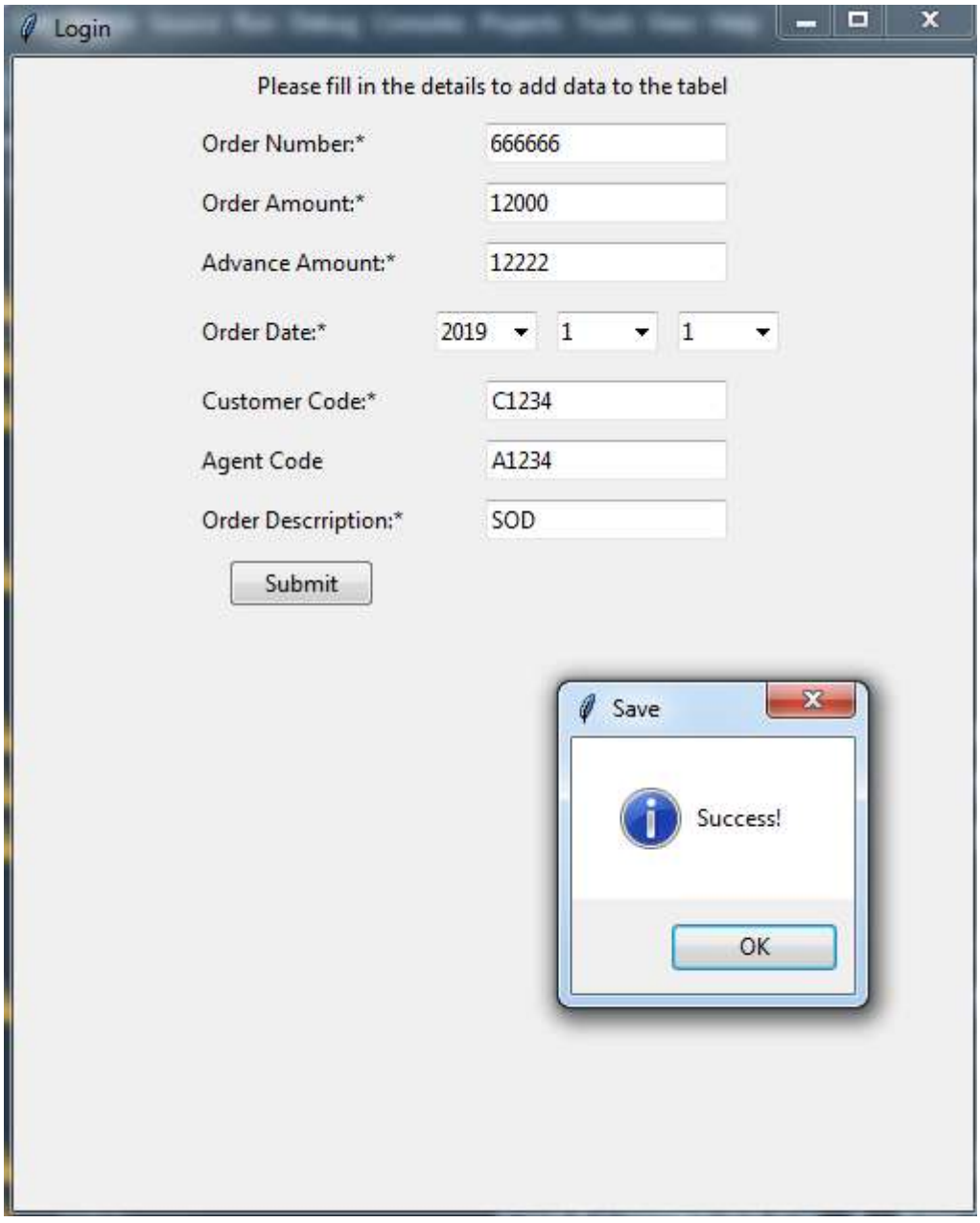

Login
User ID:*
shelar
Password:*
******
Sign in
Log In
Select the table you want to add data
Agents
Company
Customer
Orders
Submit

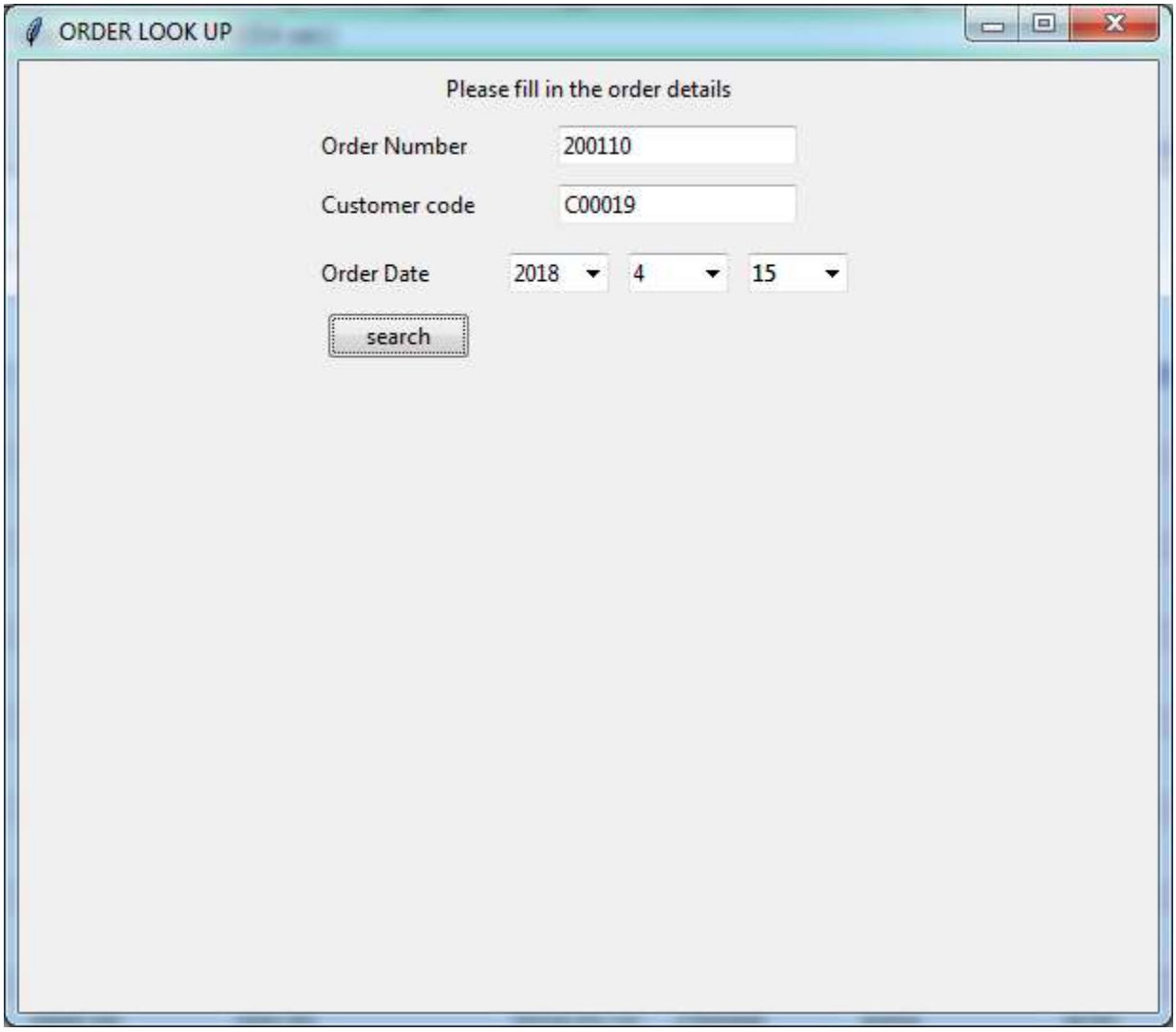

Login
Please fill in the details to add data to the tabel
Agent Code:*
Agent Name:*
Working Area:*
Commission:*
Phone number:*
Country:
Submit

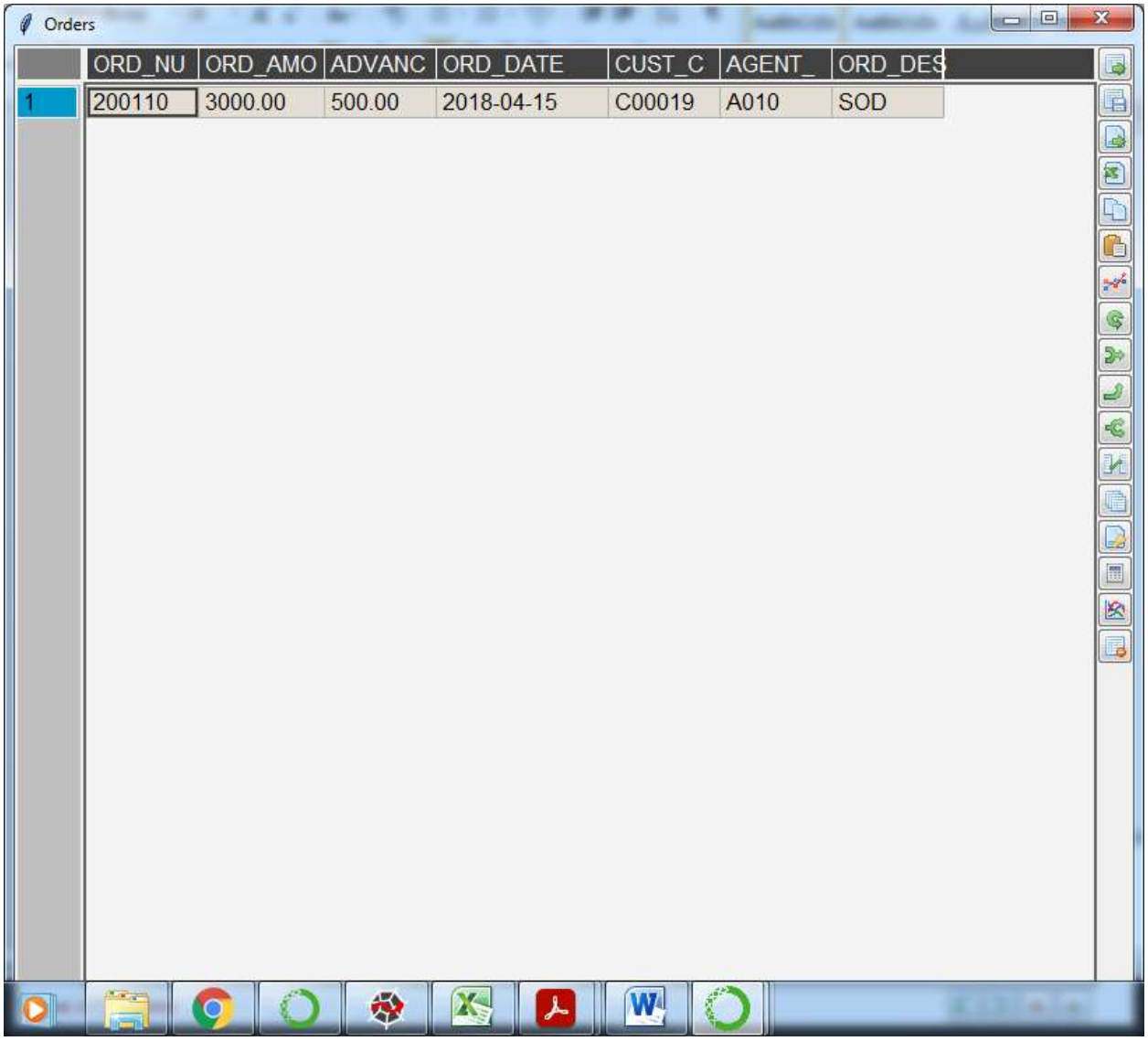

Login
Please fill in the details to add data to the tabel
Agent Code:*
A1234
Agent Name:*
hbcd sjcd
Working Area:*
ccvhc
Commission:*
0.2
Phone number:*
075-12458969
Country:
indai
Submit
Save
Success!
OK

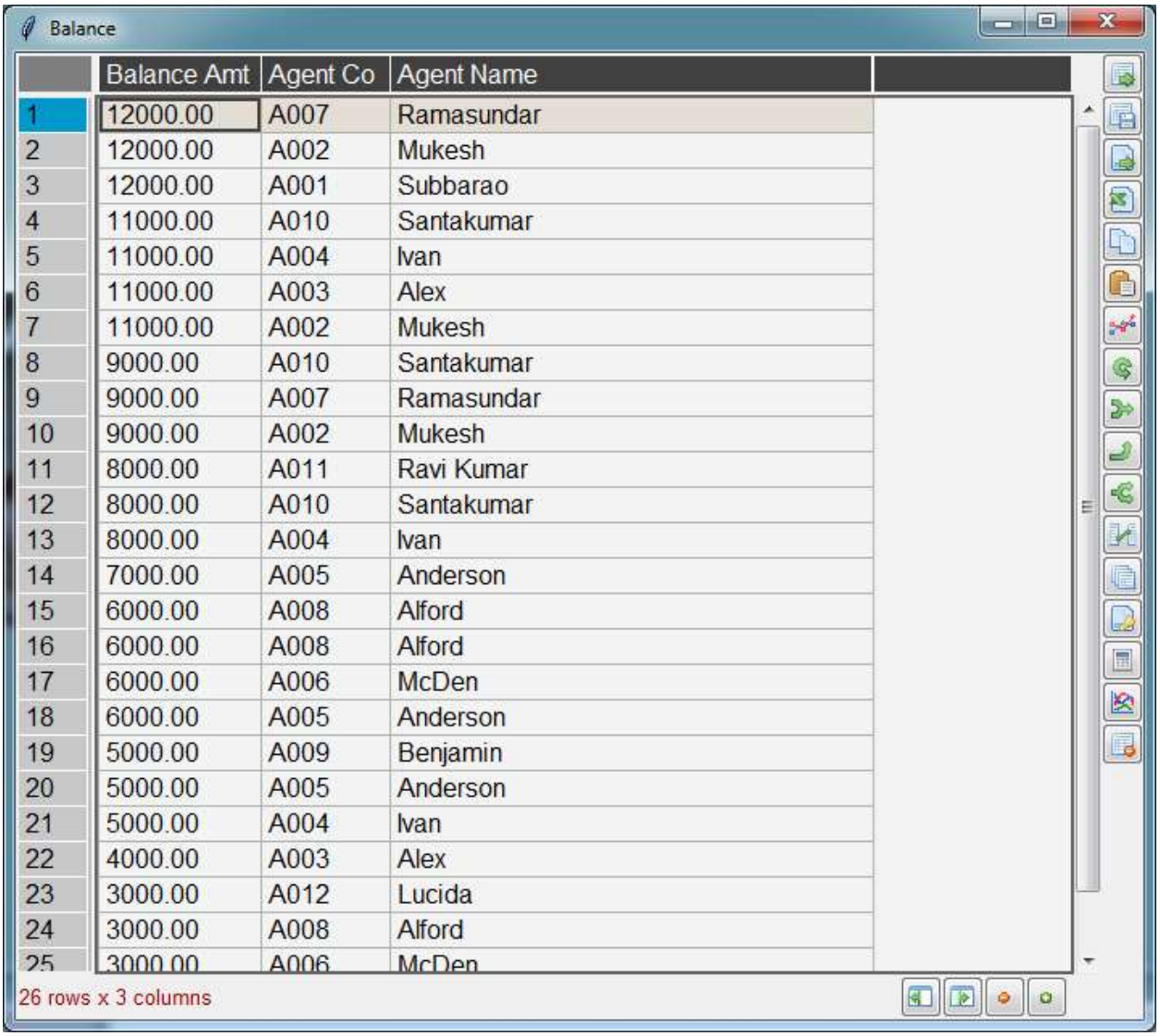

Login
Please fill in the details to add data to the tabel
Company ID*
12555
Company Name:*
jjvbfb vhunvd
Company City:*
bvkvb vjbkv
Submit
Save
Success!
OK

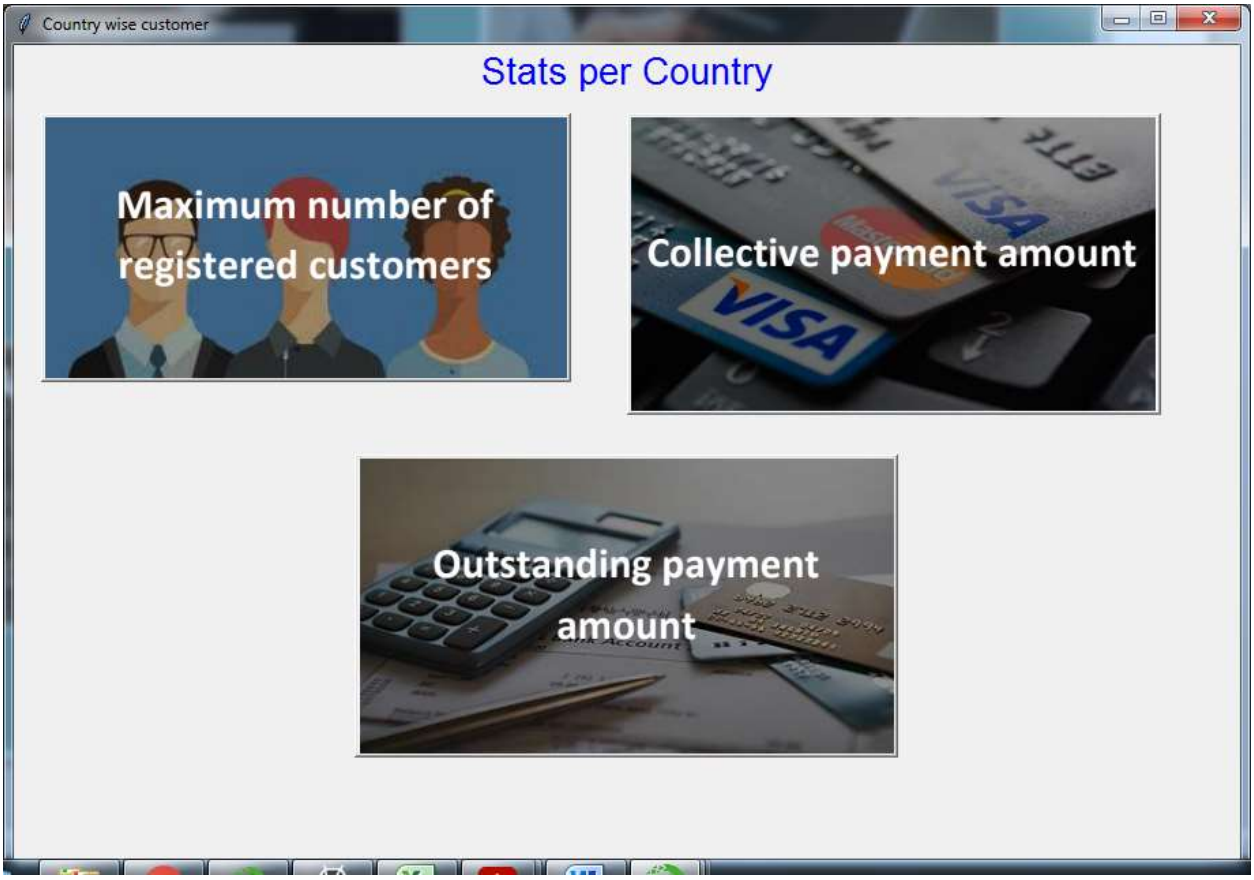

Login
Please fill in the details to add data to the tabel
Customer Code:*
C1234
Customer Name:*
vhcvdv
Customer City:*
bhdb
Working Area:*
vccvc
Customer Country:*
hvvcsacb
Grade:
15
Opening Amount:*
15555
Recive Amount:*
19000
Payment Amount:*
2800
Outstanding Amount:*
190.90
Phone NO:*
077-25814767
Agent Code
A222
Submit
Save
Success!
OK

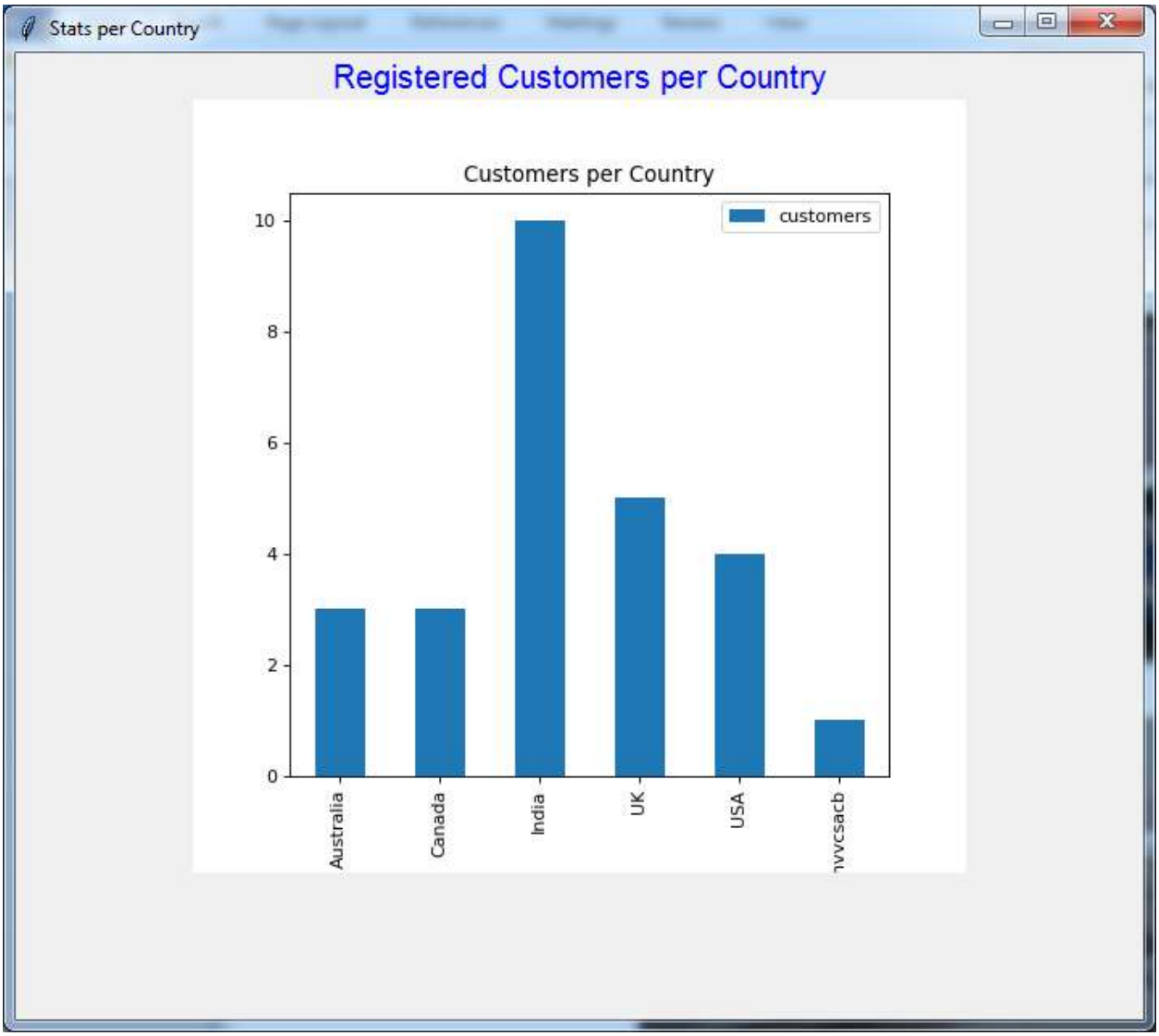

Login
Please fill in the details to add data to the tabel
Order Number:*
666666
Order Amount:*
12000
Advance Amount:*
12222
Order Date:*
2019
1
1
Customer Code:*
C1234
Agent Code
A1234
Order Descrription:*
SOD
Submit
Save
Success!
OK

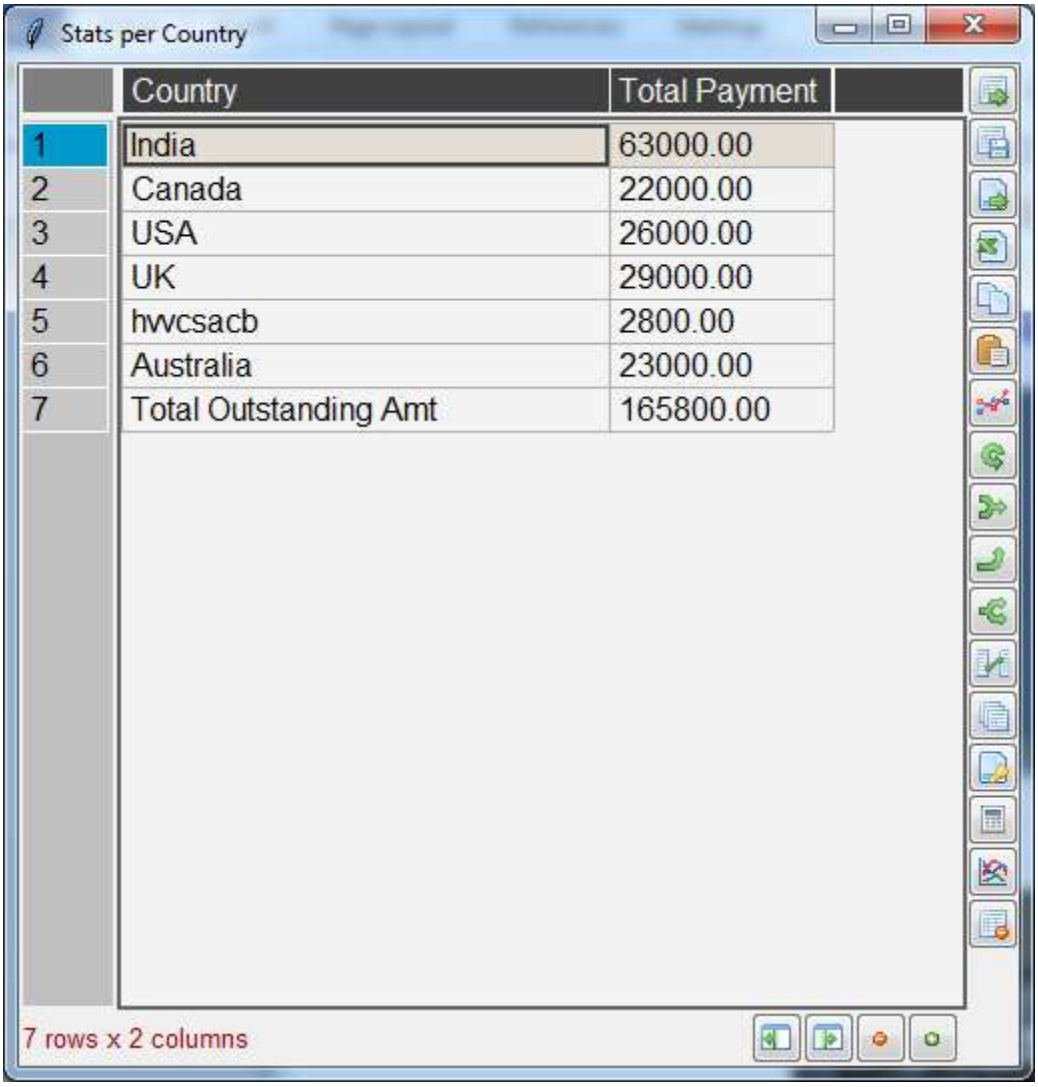

ORDER LOOK UP
Please fill in the order details
Order Number
200110
Customer code
C00019
Order Date
2018
4
15
search


Orders
ORD_NU
ORD_AMO
ADVANC
ORD_DATE
CUST_C
AGENT_
ORD_DES
1
200110
3000.00
500.00
2018-04-15
C00019
A010
SOD


Balance
Balance Amt
Agent Co
Agent Name
1 12000.00 A007 Ramasundar
2 12000.00 A002 Mukesh
3 12000.00 A001 Subbarao
4 11000.00 A010 Santakumar
5 11000.00 A004 Ivan
6 11000.00 A003 Alex
7 11000.00 A002 Mukesh
8 9000.00 A010 Santakumar
9 9000.00 A007 Ramasundar
10 9000.00 A002 Mukesh
11 8000.00 A011 Ravi Kumar
12 8000.00 A010 Santakumar
13 8000.00 A004 Ivan
14 7000.00 A005 Anderson
15 6000.00 A008 Alford
16 6000.00 A008 Alford
17 6000.00 A006 McDen
18 6000.00 A005 Anderson
19 5000.00 A009 Benjamin
20 5000.00 A005 Anderson
21 5000.00 A004 Ivan
22 4000.00 A003 Alex
23 3000.00 A012 Lucida
24 3000.00 A008 Alford
25 3000.00 A006 McDen
26 rows x 3 columns


Country wise customer
Stats per Country
Maximum number of registered customers
Collective payment amount
Outstanding payment amount

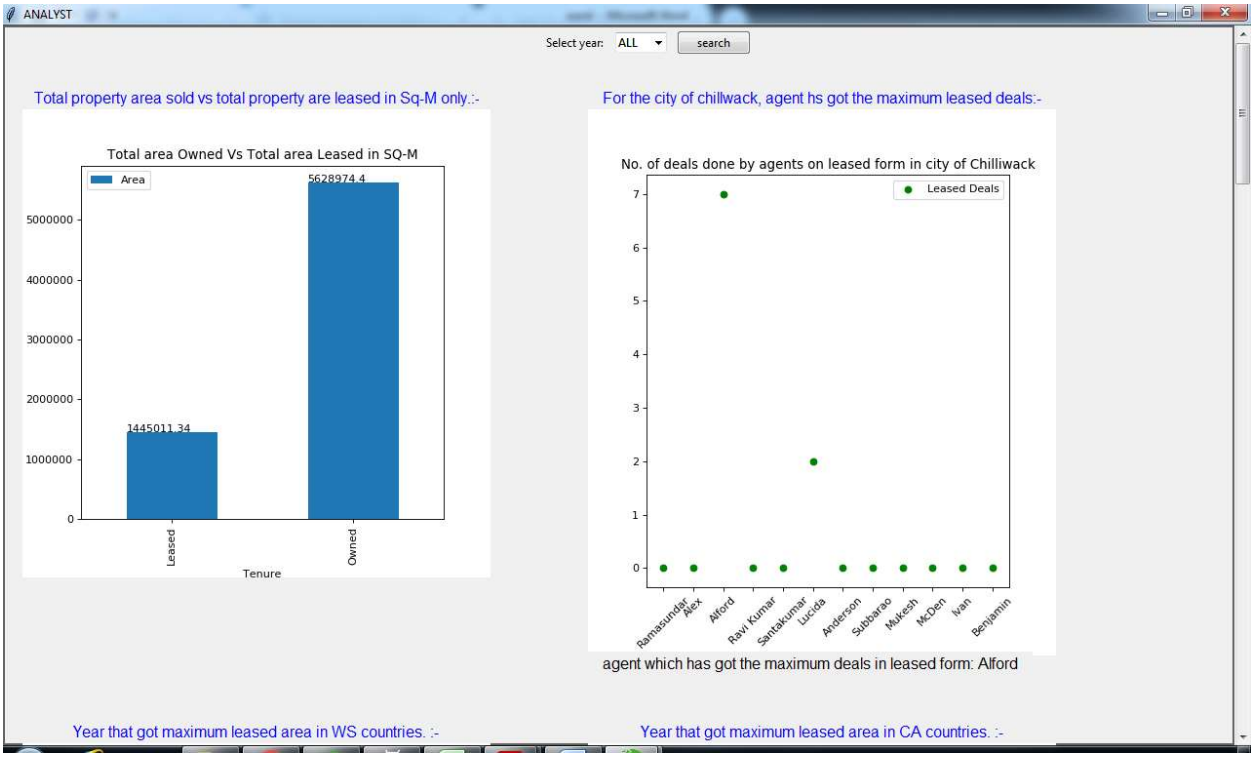

Stats per Country
Registered Customers per Country
Customers per Country
customers
10
8
6
4
2
0
Australia
Canada
India
UK
USA


Stats per Country
Country
Total Payment
1
India
63000.00
2
Canada
22000.00
3
USA
26000.00
4
UK
29000.00
5
hwcsacb
2800.00
6
Australia
23000.00
7
Total Outstanding Amt
165800.00
7 rows x 2 columns

Stats per Country

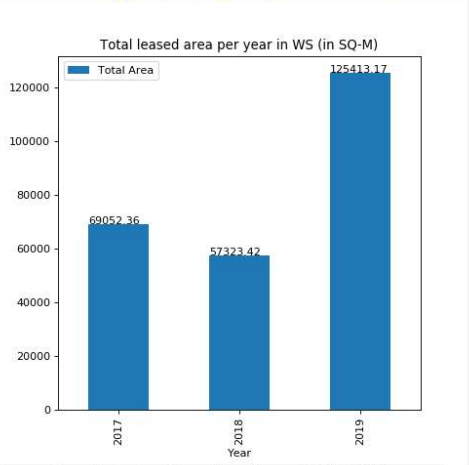
	Country	Total Outstand
1	India	101000.00
2	Canada	24000.00
3	USA	18000.00
4	UK	29000.00
5	hwcsacb	190.90
6	Australia	18000.00
7	Total Outstanding Amt	190190.90

7 rows x 2 columns

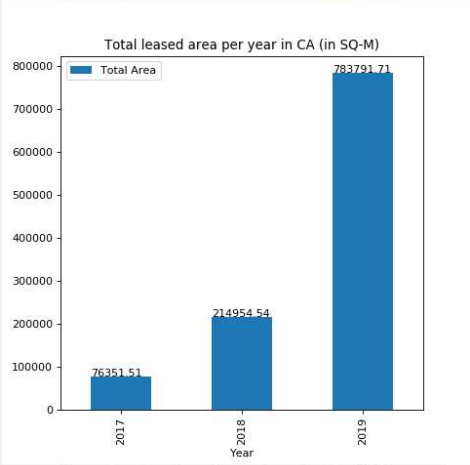


ANALYST

Year that got maximum leased area in WS countries. :-



Year that got maximum leased area in CA countries. :-



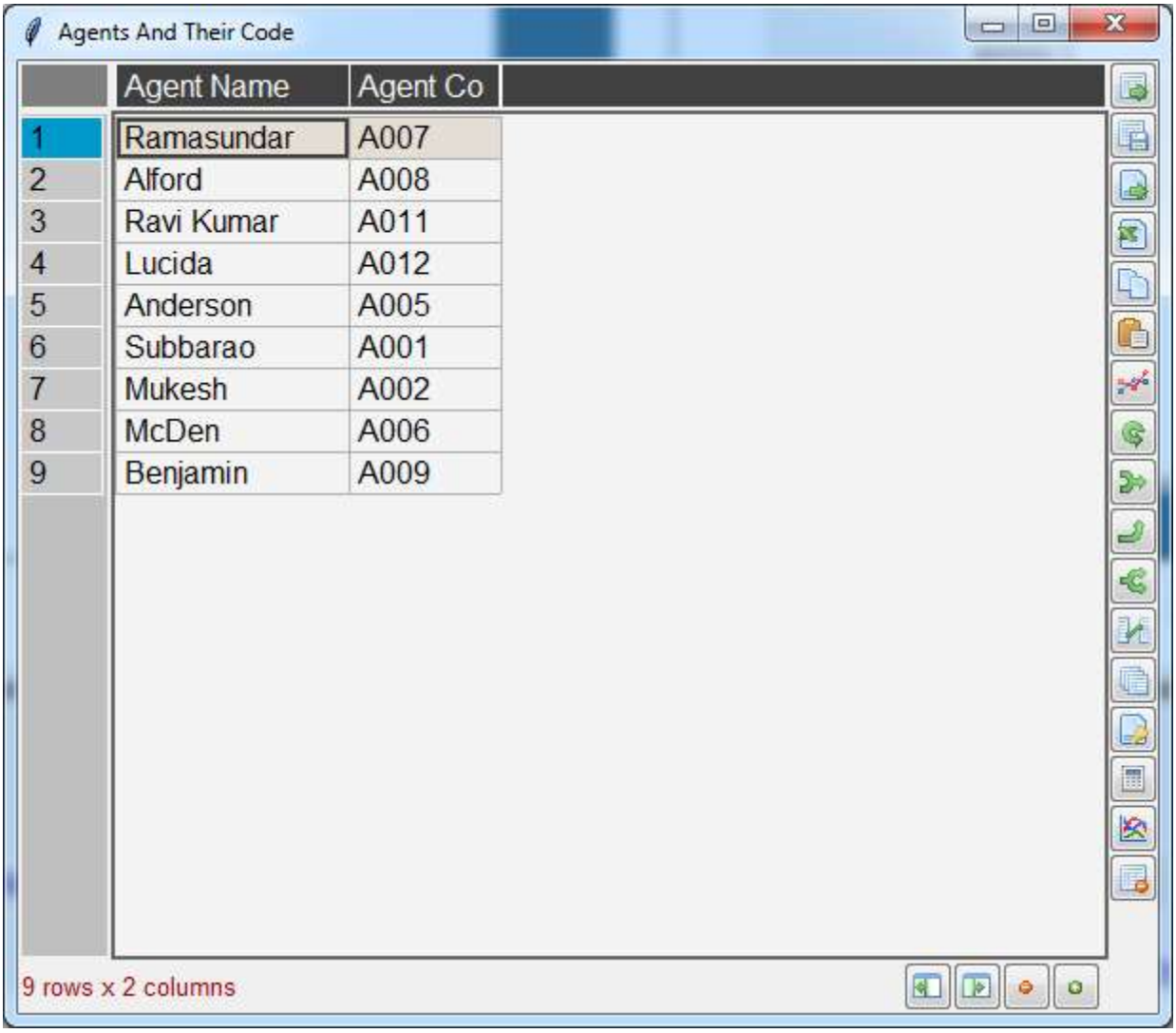
Year that got maximum leased area in WS : 2019

Year that got maximum leased area in CA : 2019

Year that got maximum leased area in both CA and WS countries : 2019

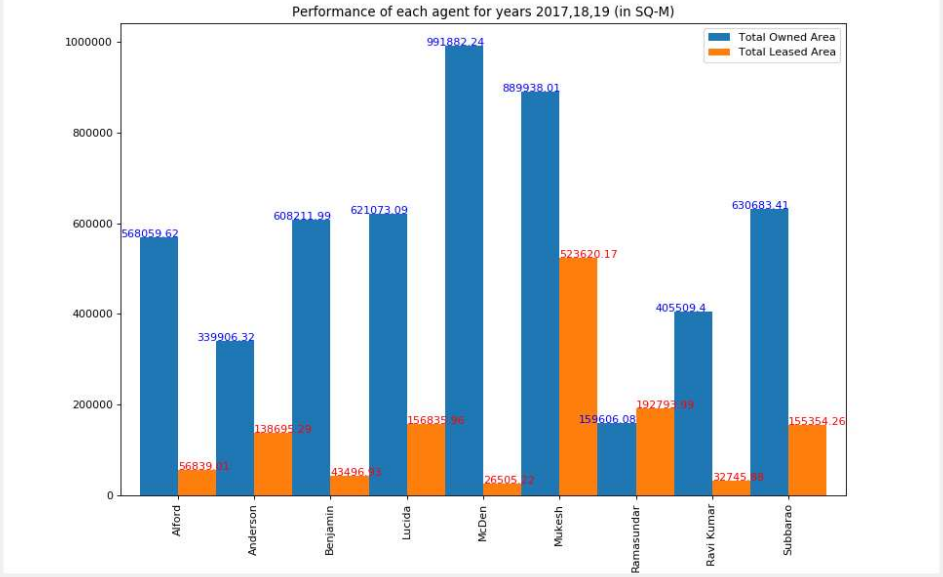
The Agent codes of all the agents who have got deals in 'OWNED' categories: click here

The performance of all agents based on the area leased and owned for the years 2017,2018 and 2019:-


Agents And Their Code
Agent Name
Agent Co
1 Ramasundar A007
2 Alford A008
3 Ravi Kumar A011
4 Lucida A012
5 Anderson A005
6 Subbarao A001
7 Mukesh A002
8 McDen A006
9 Benjamin A009
9 rows x 2 columns

ANALYST

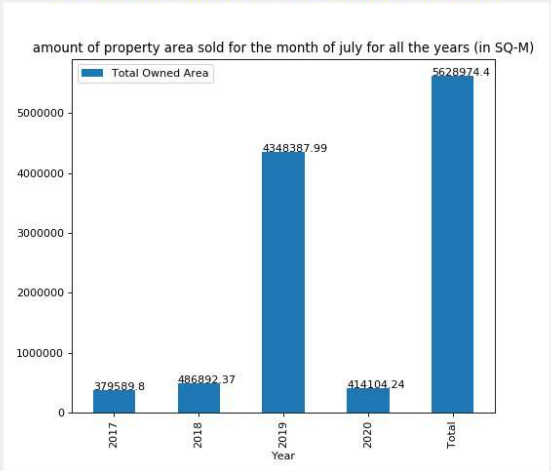
The performance of all agents based on the area leased and owned for the years 2017,2018 and 2019:-



Agent who has been the best performer is Mukesh

ANALYST

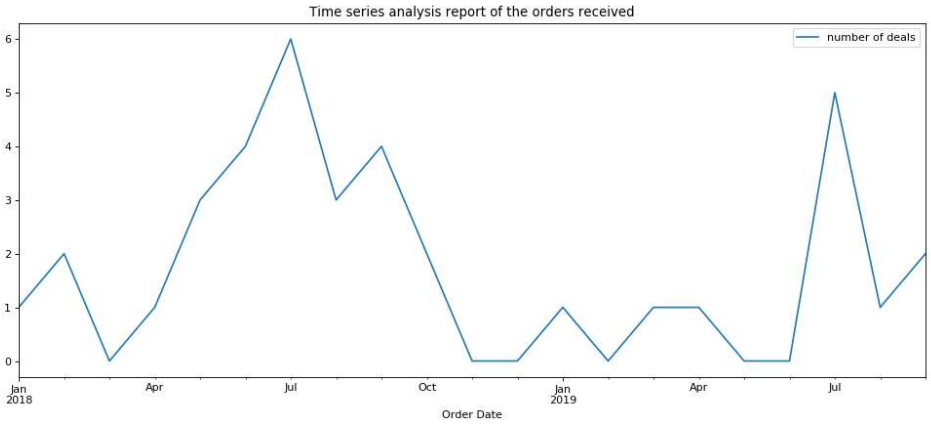
Amount of property area sold for the month of july for all the years.:-



time series analysis report of the orders received (database).:-

ANALYST

time series analysis report of the orders received (database).:-



time series analysis report of the orders received (dataset-Excel).:-

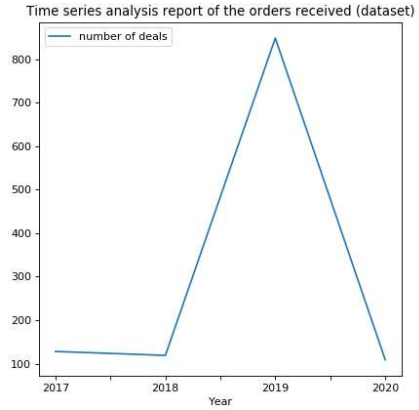
City and the number of deals done for that city click here

Percentage of Opening Amount >= Payment Amount:-

3:11 PM
10/8/2020

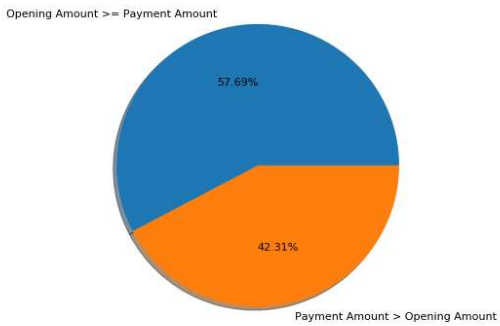
ANALYST

time series analysis report of the orders received (dataset-Excel).:-



City and the number of deals done for that city click here

Percentage of Opening Amount >= Payment Amount:-



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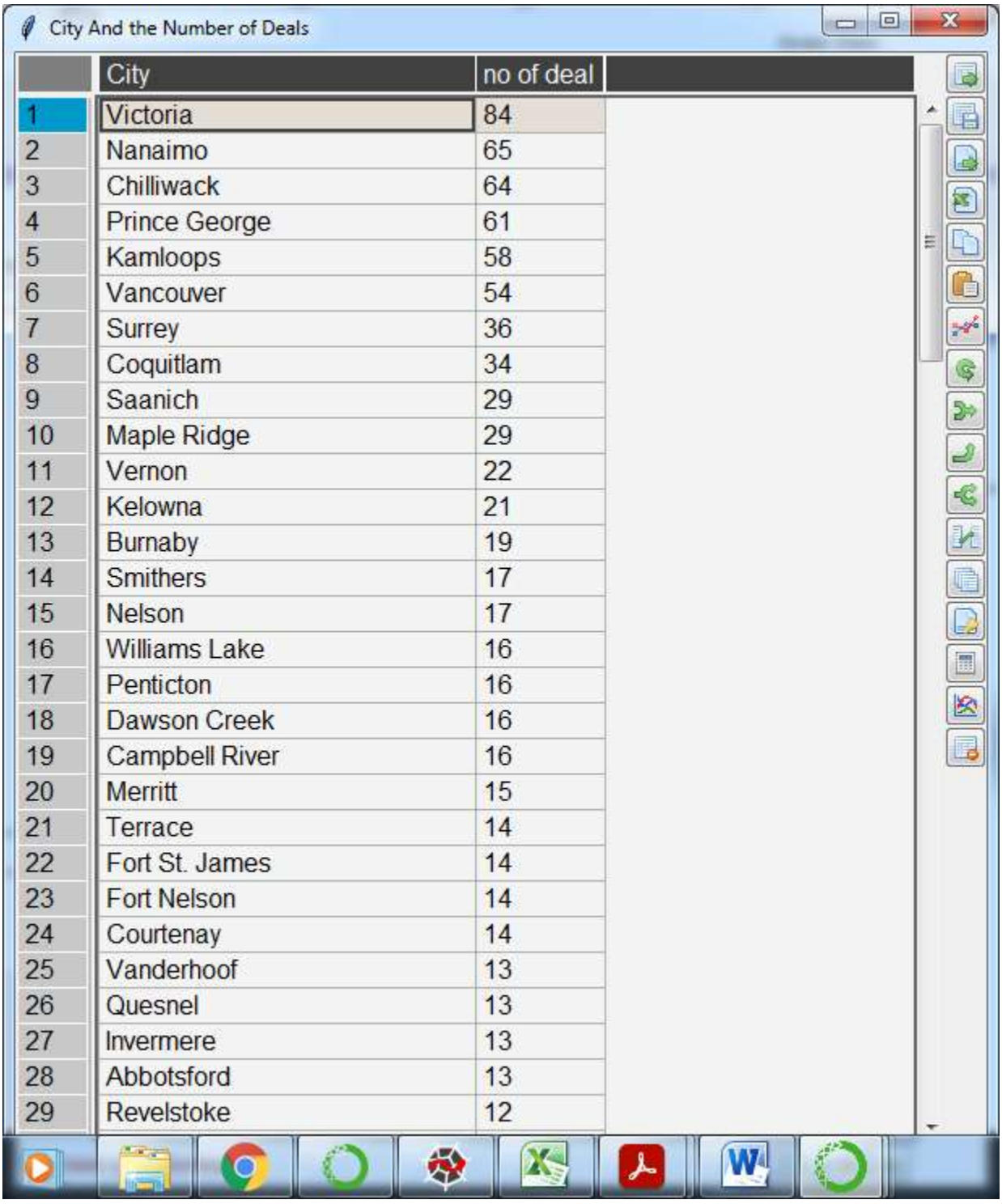
10/8/2020

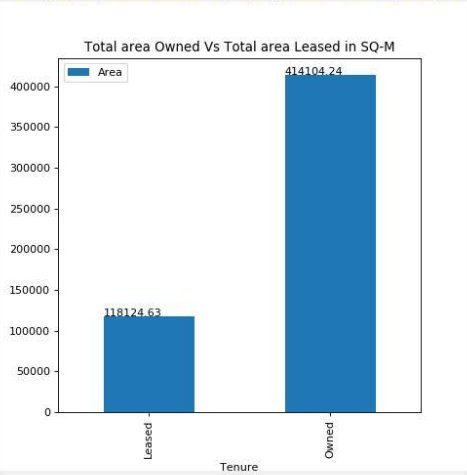


	City	no of deal
1	Victoria	84
2	Nanaimo	65
3	Chilliwack	64
4	Prince George	61
5	Kamloops	58
6	Vancouver	54
7	Surrey	36
8	Coquitlam	34
9	Saanich	29
10	Maple Ridge	29
11	Vernon	22
12	Kelowna	21
13	Burnaby	19
14	Smithers	17
15	Nelson	17
16	Williams Lake	16
17	Penticton	16
18	Dawson Creek	16
19	Campbell River	16
20	Merritt	15
21	Terrace	14
22	Fort St. James	14
23	Fort Nelson	14
24	Courtenay	14
25	Vanderhoof	13
26	Quesnel	13
27	Invermere	13
28	Abbotsford	13
29	Revelstoke	12

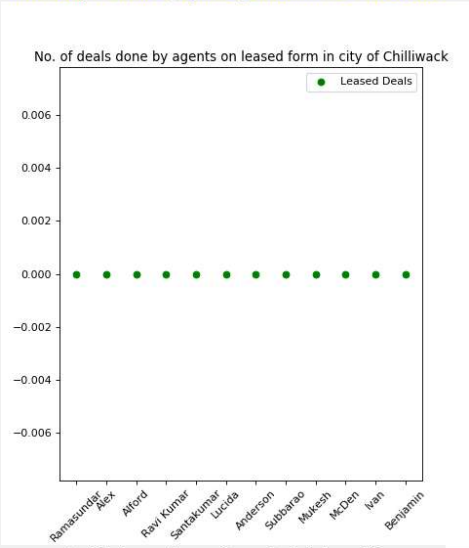
ANALYST

Select year: 2020 search

Total property area sold vs total property are leased in Sq-M only.:-



For the city of chillwack, agent hs got the maximum leased deals:-

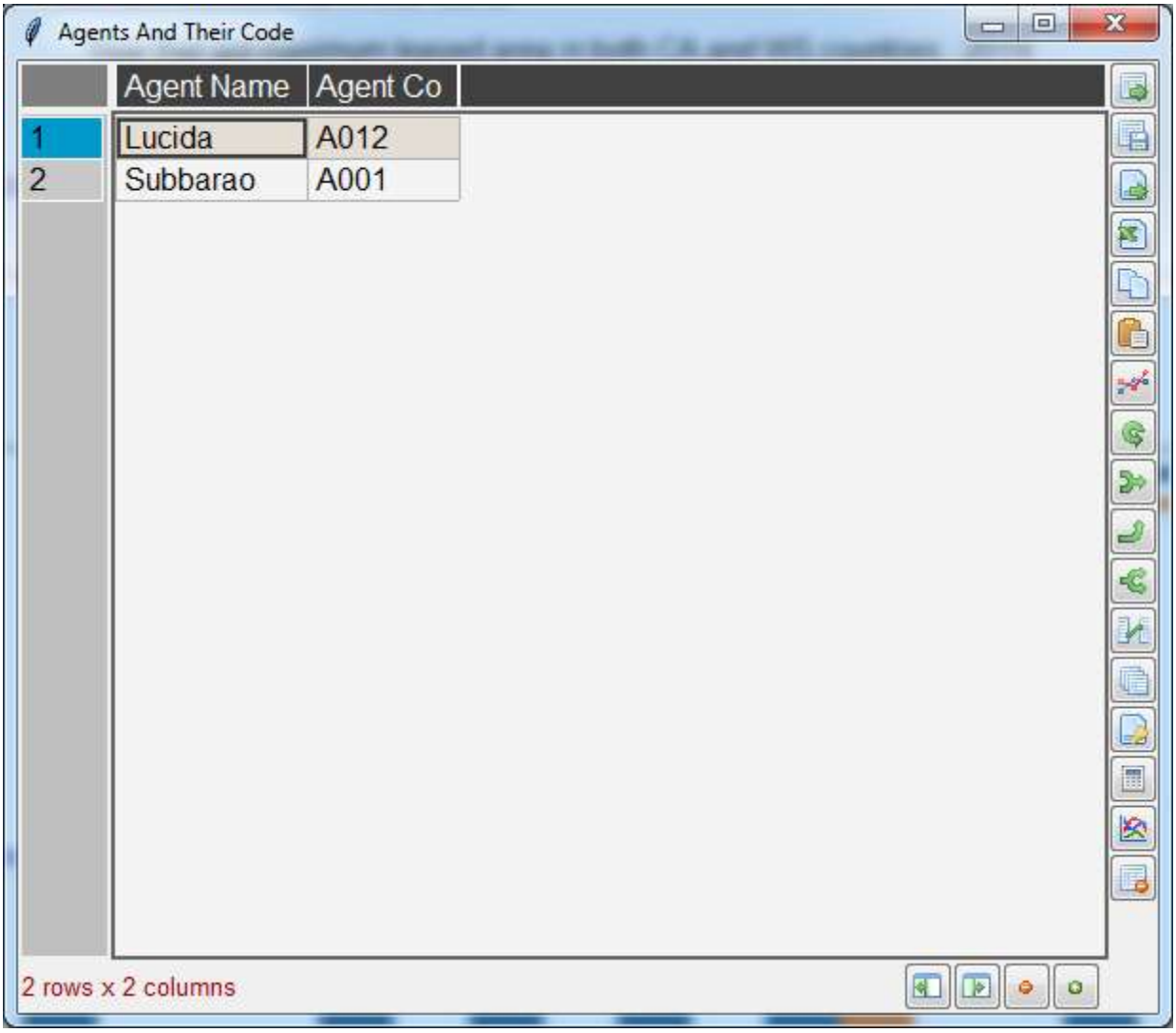


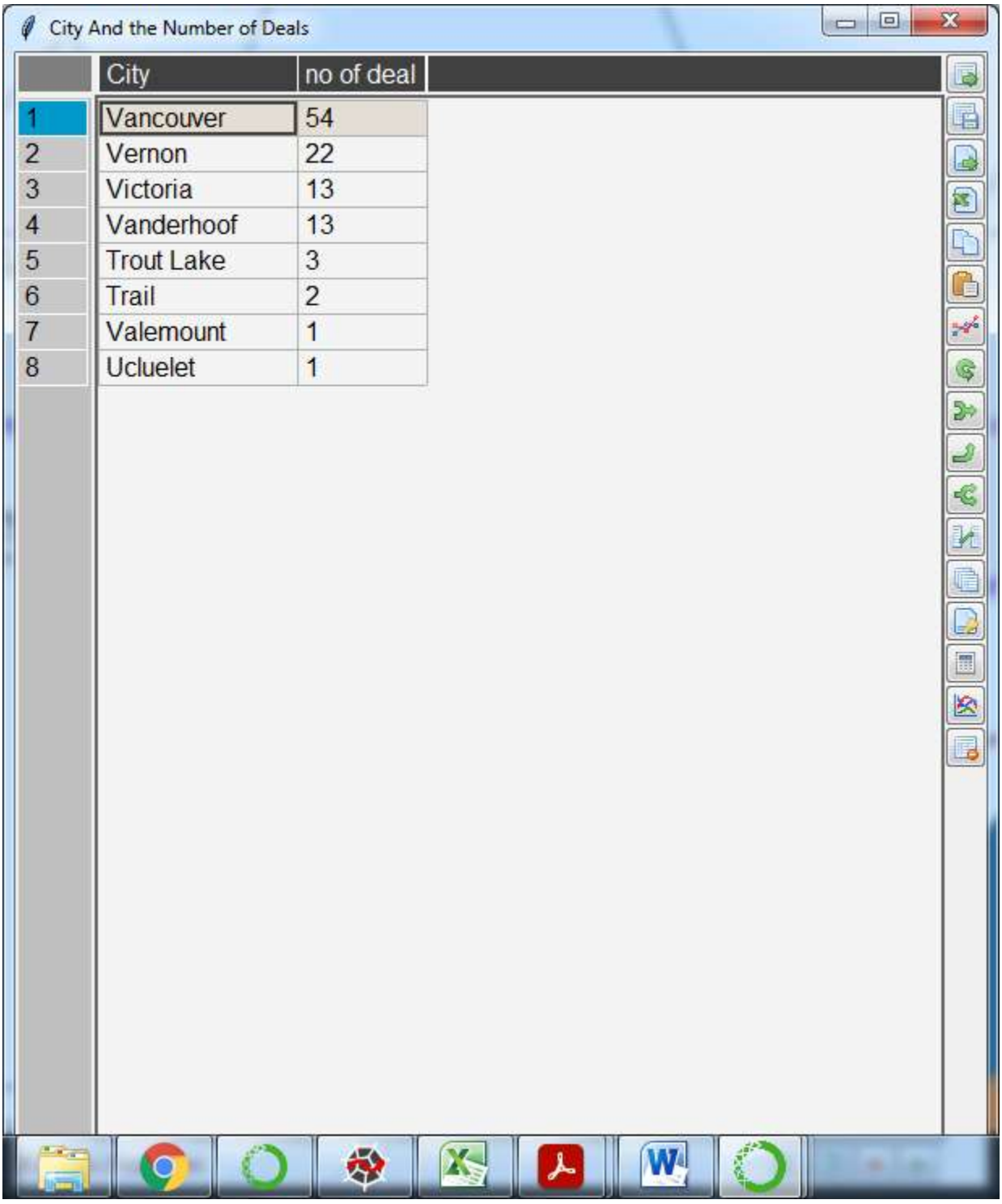
agent which has got the maximum deals in leased form:

Year that got maximum leased area in WS countries. :-

Year that got maximum leased area in CA countries. :-

3:12 PM
10/8/2020

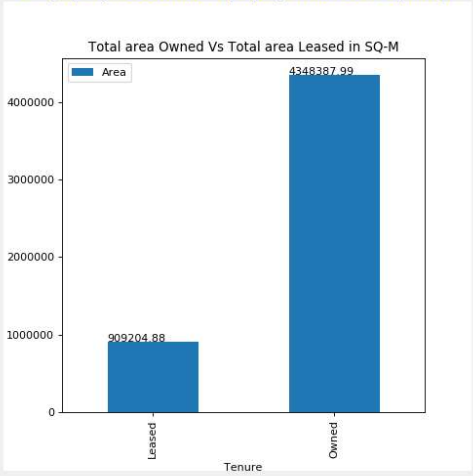

Agents And Their Code
Agent Name
Agent Co
1
2
Lucida
A012
Subbarao
A001
2 rows x 2 columns


City And the Number of Deals
City
no of deal
1
Vancouver
54
2
Vernon
22
3
Victoria
13
4
Vanderhoof
13
5
Trout Lake
3
6
Trail
2
7
Valemount
1
8
Ucluelet
1

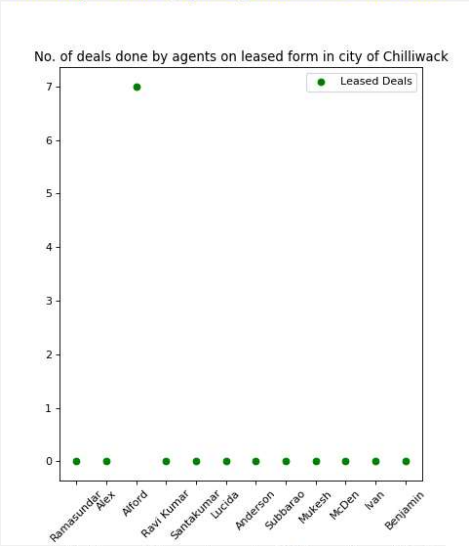
ANALYST

Select year: 2019 search

Total property area sold vs total property are leased in Sq-M only.:-



For the city of chillwack, agent hs got the maximum leased deals:-

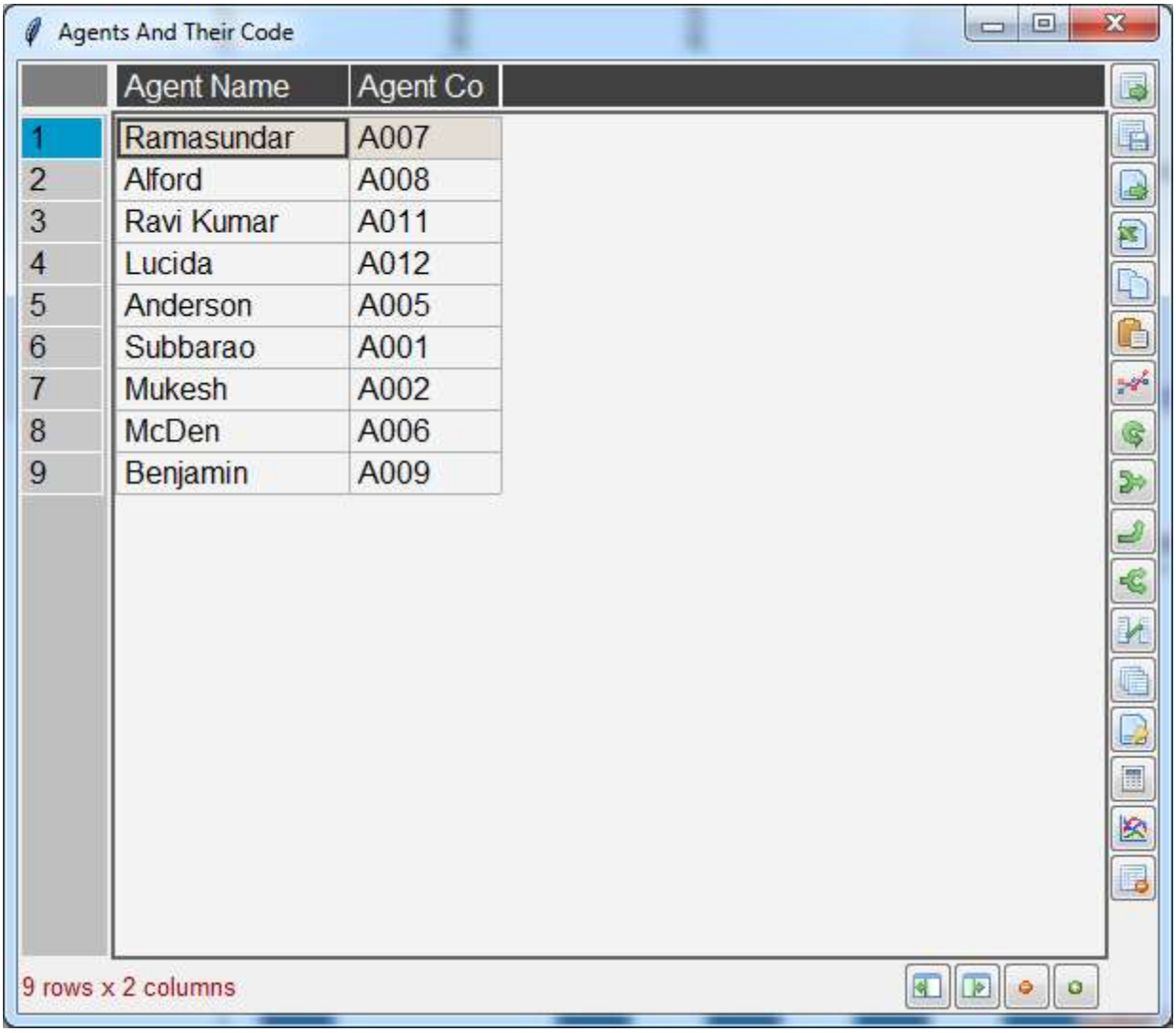


agent which has got the maximum deals in leased form: Alford

Year that got maximum leased area in WS countries. :-

Year that got maximum leased area in CA countries. :-

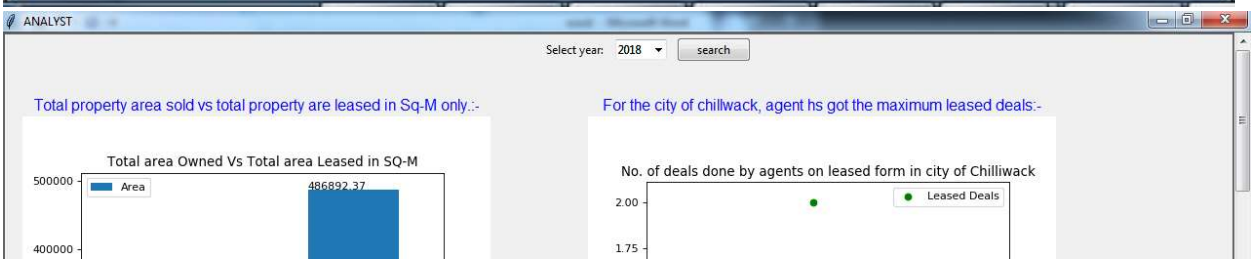
3:14 PM
10/8/2020

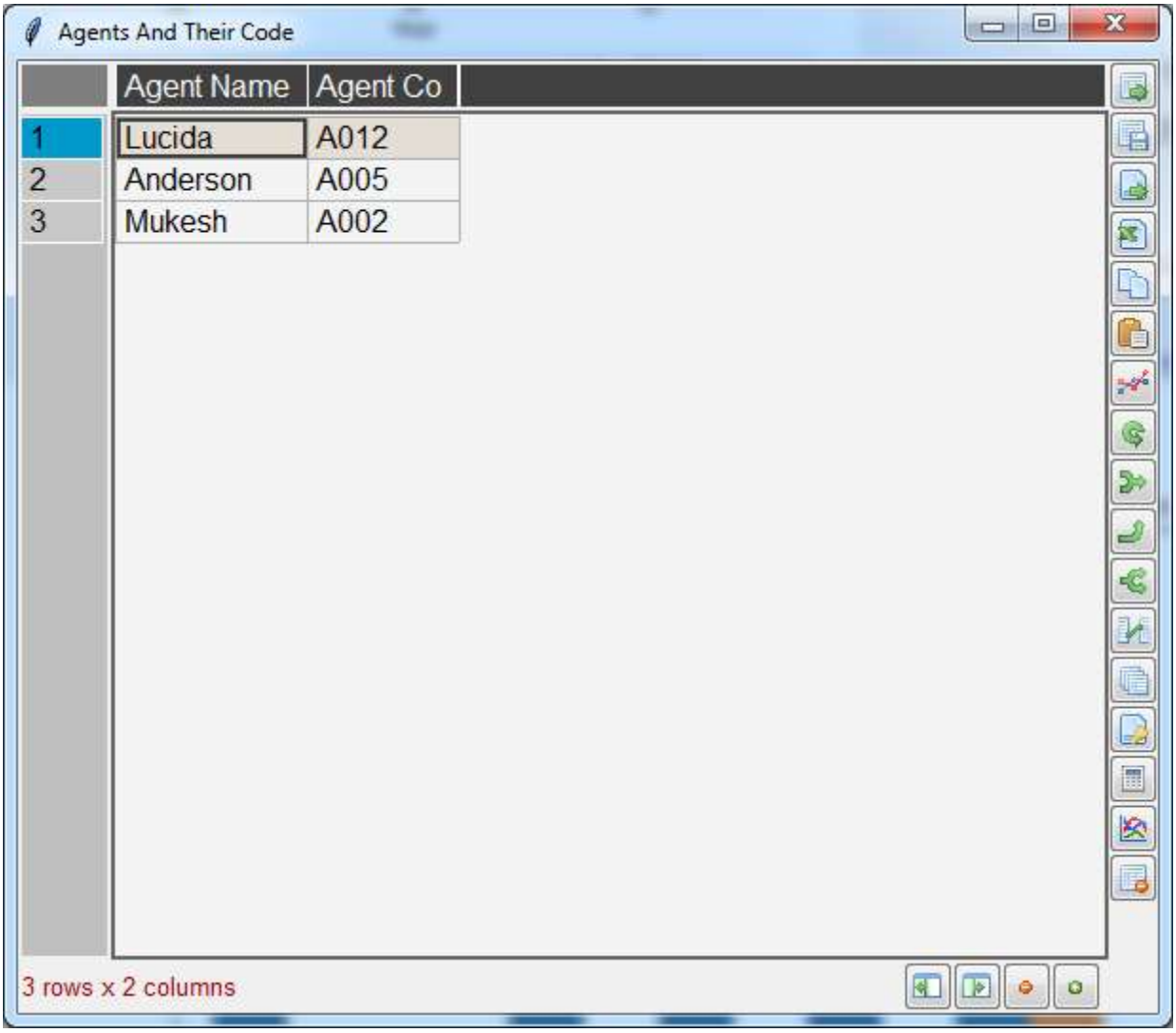

Agents And Their Code
Agent Name
Agent Co
1 Ramasundar A007
2 Alford A008
3 Ravi Kumar A011
4 Lucida A012
5 Anderson A005
6 Subbarao A001
7 Mukesh A002
8 McDen A006
9 Benjamin A009
9 rows x 2 columns

City And the Number of Deals

	City	no of deal
1	Nanaimo	65
2	Prince George	61
3	Kamloops	58
4	Chilliwack	49
5	Surrey	36
6	Coquitlam	34
7	Maple Ridge	29
8	Kelowna	21
9	Smithers	17
10	Nelson	17
11	Williams Lake	16
12	Campbell River	16
13	Merritt	15
14	Terrace	14
15	Penticton	14
16	Fort St. James	14
17	Fort Nelson	14
18	Courtenay	14
19	Quesnel	13
20	Invermere	13
21	Abbotsford	13
22	Revelstoke	12
23	Port Alberni	11
24	Duncan	11
25	Dease Lake	11
26	Queen Charlotte	10
27	Fort St. John	10
28	Castlegar	9
29	Atlin	9

101 rows x 2 columns

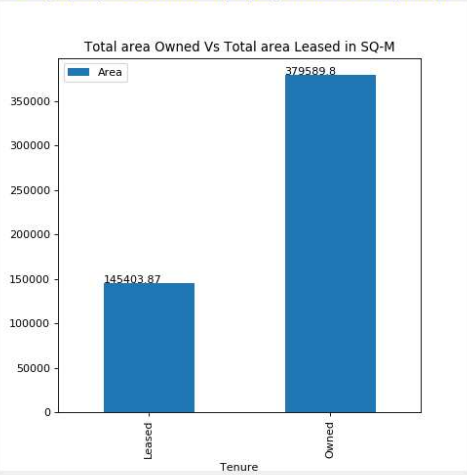



Agents And Their Code
Agent Name
Agent Co
1
Lucida
A012
2
Anderson
A005
3
Mukesh
A002
3 rows x 2 columns

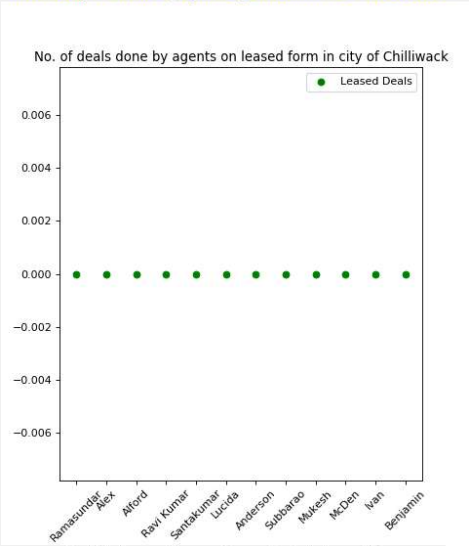
ANALYST

Select year: 2017 search

Total property area sold vs total property are leased in Sq-M only.:-



For the city of chillwack, agent hs got the maximum leased deals:-



agent which has got the maximum deals in leased form:

Year that got maximum leased area in WS countries. :-

Year that got maximum leased area in CA countries. :-

3:16 PM
10/8/2020

Testing:

Validations:

Name Entry is validated to see if it contains only alphabets and spaces. Length of the string should also be less than 40.

Email entry is validated using regex re.match(^.+@(\[?)[a-zA-Z0-9-.]+.([a-zA-Z]{2,3}|[0-9]{1,3})(]?)$)

User id entry length of the string entered should be less than 30 and more than 0

Password entry length of the string entered should be less than 20 and more than 0

Order number entry is validated using regex re.fullmatch(r"([0-9]+)")

Customer code Entry string's 1st letter should be C and the rest is validated using regex re.fullmatch(r"([0-9]+)")

Agent code Entry string's 1st letter should be A and the rest is validated using regex re.fullmatch(r"([0-9]+)")

Agent Name entry string should be consist of only alphabets and spaces . Length should be less than 40

Agent Area entry string should be consist of only alphabets and spaces . Length should be less than 35

Agent Commision Entry is validated using agentcommission.get().isnumeric() or agentcommission.get().replace('.', '', 1).isdigit()) and (len(agentcommission.get())<=10)

Phone number entries are validated using regex re.fullmatch(r'^(\d{3}-\d{8})$')

Country Entries are validated using regex re.fullmatch('[a-zA-Z\s]+$')

Company id Entry should only have digits and length should be less than 7

Company name Entry is validated using (re.fullmatch('[a-zA-Z\s]+$')

Company city Entry is validated using (re.fullmatch('[a-zA-Z\s]+$')

Customer Name entry string should be consist of only alphabets and spaces . Length should be less than 40

Customer city Entry is validated using (re.fullmatch('[a-zA-Z\s]+$')

Customer entry is validated using regex re.fullmatch('[a-zA-Z\s]+$'

Customer country is validated using regex re.fullmatch('[a-zA-Z\s]+$'

Amount entries are validated using open_amount.get().isnumeric() or open_amount.get().replace('.', '', 1).isdigit()) and 0<(len(open_amount.get()))<13

Order number entry is validated using ord_num.get().isnumeric() and len(ord_num.get())==6