

DATA MANAGEMENT

BDM3302

Phetwadee Detcharoenrungrueng (6410870)

Chofah Nutchanart (6410742)

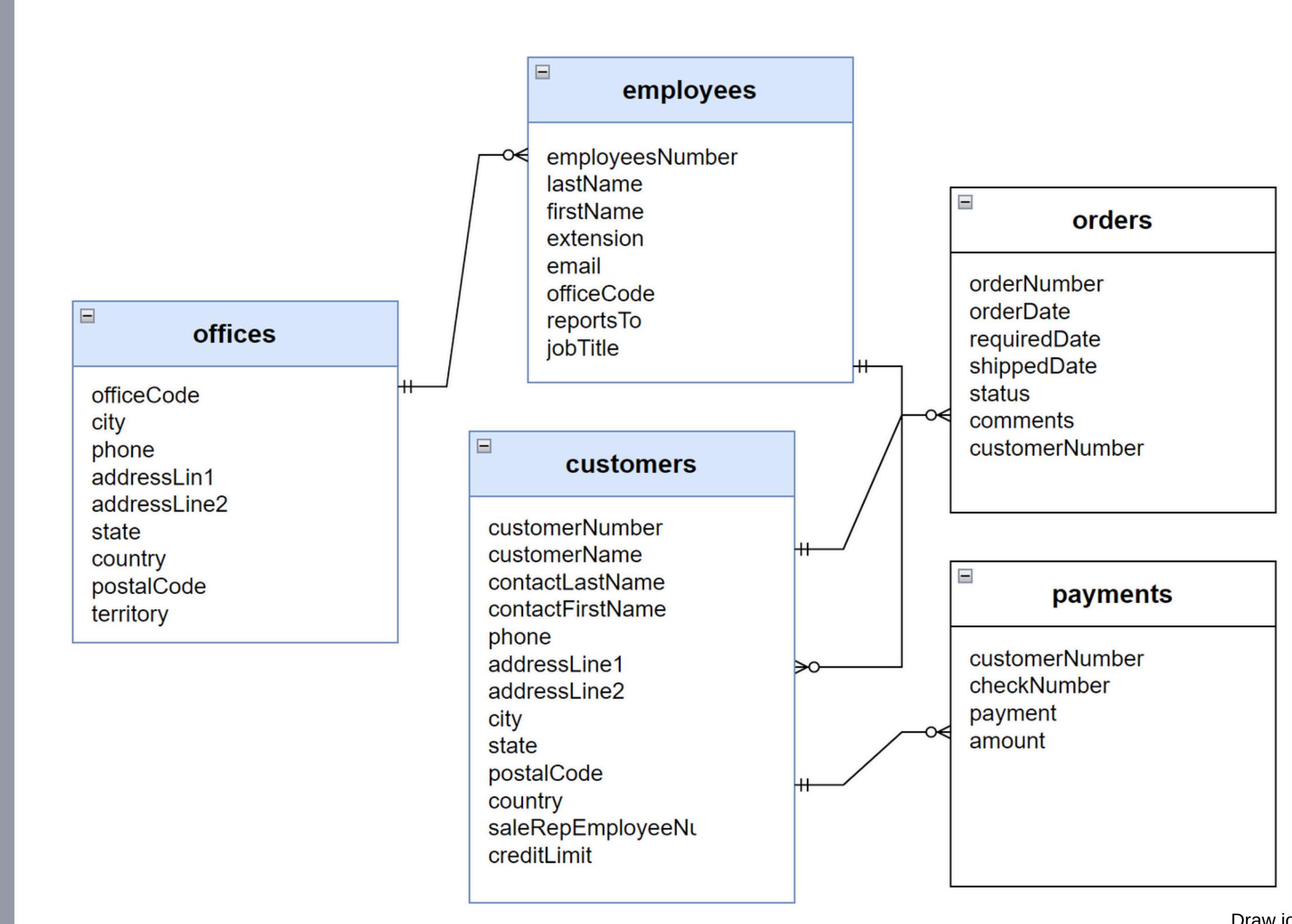
Su Myat Noe (6511338)

Sec.401

HR
DEPARTMENT
PRESENTATION

DATABASE SCHEMA

HR DEPARTMENT



DISPLAY TABLE

EMPLOYEES

Select* from employees;

employeeNumber	lastName	firstName	extension	email	officeCode	reportsTo	jobTitle
1002	Murphy	Diane	x5800	dmurphy@classicmodelcars.com	1		President
1056	Patterson	Mary	x4611	mpatterson@classicmodelcars.com	1	1002	VP Sales
1076	Firrelli	Jeff	x9273	jfirrelli@classicmodelcars.com	1	1002	VP Marketing
1088	Patterson	William	x4871	wpatterson@classicmodelcars.com	6	1056	Sales Manager (APAC)
1102	Bondur	Gerard	x5408	gbondur@classicmodelcars.com	4	1056	Sale Manager (EMEA)
1143	Bow	Anthony	x5428	abow@classicmodelcars.com	1	1056	Sales Manager (NA)
1165	Jennings	Leslie	x3291	ljennings@classicmodelcars.com	1	1143	Sales Rep
1166	Thompson	Leslie	x4065	lthompson@classicmodelcars.com	1	1143	Sales Rep
1188	Firrelli	Julie	x2173	jfirrelli@classicmodelcars.com	2	1143	Sales Rep
1216	Patterson	Steve	x4334	spatterson@classicmodelcars.com	2	1143	Sales Rep
1286	Tseng	Foon Yue	x2248	ftseng@classicmodelcars.com	3	1143	Sales Rep
1323	Vanauf	George	x4102	gvanauf@classicmodelcars.com	3	1143	Sales Rep
1337	Bondur	Loui	x6493	lbondur@classicmodelcars.com	4	1102	Sales Rep
1370	Hernandez	Gerard	x2028	ghernande@classicmodelcars.com	4	1102	Sales Rep
1401	Castillo	Pamela	x2759	pcastillo@classicmodelcars.com	4	1102	Sales Rep
1501	Bott	Larry	x2311	lbott@classicmodelcars.com	7	1102	Sales Rep
1504	Jones	Barry	x102	bjones@classicmodelcars.com	7	1102	Sales Rep
1611	Fixter	Andy	x101	afixter@classicmodelcars.com	6	1088	Sales Rep
1612	Marsh	Peter	x102	pmarsh@classicmodelcars.com	6	1088	Sales Rep
1619	King	Tom	x103	tking@classicmodelcars.com	6	1088	Sales Rep
1621	Nishi	Mami	x101	mnishi@classicmodelcars.com	5	1056	Sales Rep
1625	Kato	Yoshimi	x102	ykato@classicmodelcars.com	5	1621	Sales Rep
1702	Gerard	Martin	x2312	mgerard@classicmodelcars.com	4	1102	Sales Rep

CUSTOMERS

Select* from customers;

customerNumber	customerName	contactLastName	contactFirstName	phone	addressLine1	addressLine2	city	state	postalCode	country	salesRepEmployeeNumber	creditLimit
103	Atelier graphique	Suzanne	Carine	40-32-2555	54, rue Royale		Nantes	44000	France	1370	21000.00	
112	Signal Gift Stores	King	Jean	7025551838	8489 Strong St.		Las Vegas	NV	83030	USA	1166	71800.00
114	Australian Collectors, Co.	Ferguson	Peter	03 9820 4555	636 St Kilda Road	Level 3	Melbourne	Victoria	3004	Australia	1611	117300.00
119	La Rochelle Gifts	Labruere	Janine	40-67-8555	67, rue des Cinqante Otages		Nantes	44000	France	1370	118200.00	
121	Baane Mini Imports	Bergulfus	Jonas	07-98 9555	Erling Skakkes gate 78		Stavanger		4110	Norway	1594	81700.00
124	Mini Gifts Distributors Ltd.	Nelson	Susan	4155551450	5677 Strong St.		San Rafael	CA	97562	USA	1165	210500.00
125	Havel & Zlysek Co.	Piotrzeniewicz	Zlysek	(24) 642-7555	ul. Filtrowa 68		Warszawa		01-012	Poland	0.00	
128	Blauer See Auto, Co.	Kotef	Roland	+49 69 66 95 2355	Lynnerstr. 34		Frankfurt		60528	Germany	1504	59700.00
129	Mini Wheels Co.	Murphy	Julie	6505557878	5557 North Pendale Street		San Francisco	CA	94127	USA	1165	64600.00
131	Land of Toys Inc.	Lee	Keai	2125557838	897 Long Airport Avenue		NYC	NY	10022	USA	1323	114900.00
141	Euro+ Shopping Channel	Freyre	Diego	(91) 555 94 44	C/ Moretanzel, 86		Madrid		28034	Spain	1370	227600.00
144	Volvo Model Replicas, Co	Berglund	Christina	0921-12 3555	Bergsvigen 8		Luleå		9-958 22	Sweden	1594	53100.00
145	Danish Wholesale Imports	Petersen	Jytte	31 12 3555	Vibskovet 34		København		1734	Denmark	1401	83400.00
146	Savety & Heravit, Co.	Savety	Mary	78.32.5555	2, rue du Commerce		Lyon		69050	France	1337	123900.00
148	Dragon Souvenirs, Ltd.	Nalivkoid	Eric	+65 221 7550	Bronze Sook,	Bronz Apt. 3/3 Tesvikkye	Singapore		079903	Singapore	1621	103800.00
151	Mustch Machine Inc	Young	Jeff	2125557413	4092 Furth Circle	Suite 400	NYC	NY	10022	USA	1286	138500.00
157	Decent Classics Inc.	Leong	Kevin	2155551555	7504 Pompton St.		Allentown	PA	70267	USA	1216	100600.00
161	Technics Stores Inc.	Hachimoto	Juri	6505556099	9408 Furth Circle		Burlingame	CA	94217	USA	1465	84600.00
166	Handy Gifks Co	Victorino	Wendy	+65 224 1555	106 Linden Road Sandown	2nd Floor	Singapore		059945	Singapore	1612	97900.00
167	Herku Gift Store	Oxstan	Vesyl	+47 220 3215	Brynhem St. 121	PR 334 Sentrum	Bergen		58034	Norway	1594	96800.00
168	American Souvenirs Inc	Franco	Keith	2035557945	149 Spinaker Dr.	Suite 101	New Haven	CT	97923	USA	1286	0.00
169	Porto Imports Co.	de Castro	Isabel	(1) 356-5555	Entrada da saída n. 58		Lisboa		1756	Portugal	0.00	
171	Daedalus Design Imports	Rancic	Martine	20.16.1555	184, chaussée de Tournai		Lille		59000	France	1370	82900.00
172	Le Corre D'Abondance, Co.	Bertrand	Marie	(1) 42.34.2555	265, boulevard Charronne		Paris		75012	France	1337	84300.00
173	Cambridge Collectables Co.	Tseng	Jimmy	4175555555	4658 Baden Av.		Cambridge	MA	51247	USA	1188	43400.00
175	GIFT Depot Inc.	King	Julie	2035551570	3593 South Bay Ln.		Bridgewater	CT	97562	USA	1323	84300.00
177	Osaka Souvenirs Co.	Kentary	Mory	+81 06 6342 5555	1-6-20 Dojima		Kita-ku	Osaka	530-0003	Japan	1621	81200.00
181	Vtachrome Inc.	Frick	Michael	2125551500	2678 Kingsgate Rd.	Suite 101	NYC	NY	10022	USA	1296	76400.00
186	Toys of Finland, Co.	Karttunen	Matti	90-224 8555	Keskustori 45		Helsinki		21240	Finland	1591	96500.00
187	All Stores, Co.	Asworth	Rachel	(171) 555-1555	Fairlawn/City Circus		Manchester	EC2 SNT	UK	1591	136000.00	
189	Clover Collection, Co.	Cessidy	Dean	+352 1862 1593	25 Mainen Lane	Floor No. 4	Dublin		2	Ireland	1594	69400.00
190	Auto-Moto Classics Inc.	Taylor	Leslie	617555428	16780 Pompton St.		Bridgewater	MA	58329	USA	1216	23000.00
201	UK Collections, Ltd.	Devon	Elizabeta	(171) 555-2182	12, Berkster Gardens Blvd		Liverpool		1501	UK	92700.00	
202	Canadian Gift Exchange Network	Tamari	Yoshi	(604) 555-3292	1930 Oak St.		Vancouver	BC	V3P 2K1	Canada	1323	93000.00
204	Online Mini Collectables	Barejas	Miguel	6175557555	7635 Spinaker Dr.		Brickhaven	MA	58339	USA	1188	48700.00
205	Toys4Grownups.com	Young	Julie	6265557265	78934 Hillside Dr.		Pasadena	CA	90003	USA	1166	94700.00
206	Asian Shopping Network, Co	Walker	Brydney	+612 9411 1555	Sunset Tower Three	8 Temasek	Singapore		039888	Singapore	0.00	
209	Mini Caravans	Cheau	Frédérique	88.60.1555	24, place Kléber		Strasbourg		67000	France	1370	53800.00
211	King Kong Collectables, Co.	Gore	Mike	+852 2251 1555	Bank of China Tower	1 Garden Road	Central Hong Kong			Hong Kong	1621	58600.00
216	Enaco Distributors	Saevedra	Eduardo	(93) 203 4555	Rambla de Cataluña, 23		Barcelona		08022	Spain	1702	60300.00
219	Boards & Toys Co.	Young	Mary	3105523737	4097 Deugas Av.		Glendale	CA	92561	USA	1166	11000.00
223	Naturalch Autos	Kloss	Horst	0370-55158	Tauchermühle 10		Cologne		01307	Germany	0.00	
227	Henzart Collectables	Ibsen	Pelin	86 21 3555	Smaglojet 45		Århus		8205	Denmark	1401	120800.00
233	Québec Home Shopping Network	Fresnire	Jean	(514) 555-8554	43 rue St. Laurent		Montréal	H1J 1C3	Canada	1286	48700.00	
237	ALG Resellers	Cantino	Alexandra</									

DISPLAY TABLE

customerNumber	checkNumber	paymentDate	amount
103	HQ336336	2004-10-19	6066.78
103	JM555205	2003-06-05	14571.44
103	OM314933	2004-12-18	1676.14
112	BO864823	2004-12-17	14191.12
112	HQ55022	2003-06-06	32641.98
112	ND748579	2004-08-20	33347.88
114	GG31455	2003-05-20	45864.03
114	MA765515	2004-12-15	82261.22
114	NP603840	2003-05-31	7565.08
114	NR27552	2004-03-10	44894.74
119	DB933704	2004-11-14	19501.82
119	LN373447	2004-08-08	47924.19
119	NG94694	2005-02-22	49523.67
121	DB889831	2003-02-16	50218.95
121	FD317790	2003-10-28	1491.38
121	KI831359	2004-11-04	17876.32
121	MA302151	2004-11-28	34638.14
124	AE215433	2005-03-05	101244.59
124	BG255406	2004-08-28	85410.87
124	CQ287967	2003-04-11	11044.30

P A Y M E N T S
Select* from payments;

DISPLAY TABLE

ORDERS

Select* from orders;

	orderNumber	orderDate	requiredDate	shippedDate	status	comments	customerNumber
1	10100	2003-01-06	2003-01-13	2003-01-10	Shipped	null	363
2	10101	2003-01-09	2003-01-18	2003-01-11	Shipped	Check on availability.	128
3	10102	2003-01-10	2003-01-18	2003-01-14	Shipped	null	181
4	10103	2003-01-29	2003-02-07	2003-02-02	Shipped	null	121
5	10104	2003-01-31	2003-02-09	2003-02-01	Shipped	null	141
6	10105	2003-02-11	2003-02-21	2003-02-12	Shipped	null	145
7	10106	2003-02-17	2003-02-24	2003-02-21	Shipped	null	278
8	10107	2003-02-24	2003-03-03	2003-02-26	Shipped	Difficult to negotiate with customer. We need more marketing n	131
9	10108	2003-03-03	2003-03-12	2003-03-08	Shipped	null	385
10	10109	2003-03-10	2003-03-19	2003-03-11	Shipped	Customer requested that FedEx Ground is used for this shipping	486
11	10110	2003-03-18	2003-03-24	2003-03-20	Shipped	null	187
12	10111	2003-03-25	2003-03-31	2003-03-30	Shipped	null	129
13	10112	2003-03-24	2003-04-03	2003-03-29	Shipped	Customer requested that ad materials (such as posters, pamphle	144

PRODUCTS

Select* from products;

	productCode	productName	productLine	productScale	productVendor	productDescription	quantityInStock
1	S10_1678	1969 Harley Davidson Ultimate Chopper	Motorcycles	1:10	Min Lin Diecast	This replica features working kickstand, front suspension, gear-s	7933
2	S10_1949	1952 Alpine Renault 1300	Classic Cars	1:10	Classic Metal Creations	Turnable front wheels; steering function; detailed interior; detail	7305
3	S10_2016	1996 Moto Guzzi 1100i	Motorcycles	1:10	Highway 66 Mini Classics	Official Moto Guzzi logos and insignias, saddle bags located on	6625
4	S10_4698	2003 Harley-Davidson Eagle Drag Bike	Motorcycles	1:10	Red Start Diecast	Model features, official Harley Davidson logos and insignias, det	5582
5	S10_4757	1972 Alfa Romeo GTA	Classic Cars	1:10	Motor City Art Classics	Features include: Turnable front wheels; steering function; detail	3252
6	S10_4962	1962 LanciaA Delta 16V	Classic Cars	1:10	Second Gear Diecast	Features include: Turnable front wheels; steering function; detail	6791
7	S12_1099	1968 Ford Mustang	Classic Cars	1:12	Autoart Studio Design	Hood, doors and trunk all open to reveal highly detailed interior	68
8	S12_1108	2001 Ferrari Enzo	Classic Cars	1:12	Second Gear Diecast	Turnable front wheels; steering function; detailed interior; detail	3619
9	S12_1666	1958 Setra Bus	Trucks and Buses	1:12	Welly Diecast Productions	Model features 30 windows, skylights & glare resistant glass, wi	1579
10	S12_2823	2002 Suzuki XREO	Motorcycles	1:12	Unimax Art Galleries	Official logos and insignias, saddle bags located on side of motoc	9997
11	S12_3148	1969 Corvair Monza	Classic Cars	1:18	Welly Diecast Productions	1:18 scale die-cast about 10" long door open, hood opens, tru	6906
12	S12_3380	1968 Dodge Charger	Classic Cars	1:12	Welly Diecast Productions	1:12 scale model of a 1968 Dodge Charger. Hood, doors and tru	9123
13	S12_3891	1969 Ford Falcon	Classic Cars	1:12	Second Gear Diecast	Turnable front wheels; steering function; detailed interior; detail	1049
14	S12_3990	1970 Plymouth Hemi Cuda	Classic Cars	1:12	Studio M Art Models	Very detailed 1970 Plymouth Cuda model in 1:12 scale. The Cud	5663
15	S12_4473	1957 Chevy Pickup	Trucks and Buses	1:12	Exoto Designs	1:12 scale die-cast about 20" long Hood opens, Rubber wheels	6125
16	S12_4675	1969 Dodge Charger	Classic Cars	1:12	Welly Diecast Productions	Detailed model of the 1969 Dodge Charger. This model includer	7323
17	S18_1097	1940 Ford Pickup Truck	Trucks and Buses	1:18	Studio M Art Models	This model features soft rubber tires, working steering, rubber n	2613
18	S18_1129	1993 Mazda RX-7	Classic Cars	1:18	Highway 66 Mini Classics	This model features, opening hood, opening doors, detailed eng	3975
19	S18_1342	1937 Lincoln Berline	Vintage Cars	1:18	Motor City Art Classics	Features opening engine cover, doors, trunk, and fuel filler cap.	8693

DISPLAY TABLE

OFFICES

Select* from offices;

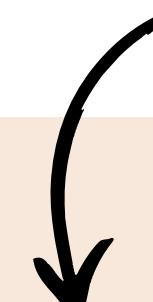
	officeCode	city	phone	addressLine1	addressLine2	state	country	postalCode	territory
1	1	San Francisco	+1 650 219 4782	100 Market Street	Suite 300	CA	USA	94080	NA
2	2	Boston	+1 215 837 0825	1550 Court Place	Suite 102	MA	USA	02107	NA
3	3	NYC	+1 212 555 3000	523 East 53rd Street	apt. 5A	NY	USA	10022	NA
4	4	Paris	+33 14 723 4404	43 Rue Jouffroy D'abbans	null	null	France	75017	EMEA
5	5	Tokyo	+81 33 224 5000	4-1 Kioicho	null	Chiyoda-Ku	Japan	102-8578	Japan
6	6	Sydney	+61 2 9264 2451	5-11 Wentworth Avenue	Floor #2	null	Australia	NSW 2010	APAC
7	7	London	+44 20 7877 2041	25 Old Broad Street	Level 7	null	UK	EC2N 1HN	EMEA

USAGE OF DATA ALCHEMIST AND DATA AGGREGATION

NUMBER OF EMPLOYEES

```
select count(*) as  
number_of_employees  
from employees;
```

The company is the small enterprises,
due to have 23 employees.



number_of_employees	
1	23

Business size

Small enterprises (10 to 49 employees)
Medium-sized enterprises (50 to 249 employees).
Large enterprises employ 250 or more people.

NUMBER OF EMPLOYEES IN EACH CITY, STATE, COUNTRY AND TERRITORY

	number_of_employees	city	state	country	territory
1	6	San Francisco	CA	USA	NA
2	5	Paris	null	France	EMEA
3	4	Sydney	null	Australia	APAC
4	2	London	null	UK	EMEA
5	2	NYC	NY	USA	NA
6	2	Boston	MA	USA	NA
7	2	Tokyo	Chiyoda-Ku	Japan	Japan

```
SELECT COUNT(E.EMPLOYEENUMBER) AS  
NUMBER_OF_EMPLOYEES, O.CITY, O.STATE,  
O.COUNTRY, O.TERRITORY  
FROM EMPLOYEES AS E  
INNER JOIN OFFICES AS O  
ON E.OFFICECODE = O.OFFICECODE  
GROUP BY O.CITY, O.STATE, O.COUNTRY, O.  
TERRITORY  
ORDER BY COUNT(E.EMPLOYEENUMBER) DESC;
```

From here, we can see that how many number of employees are there according to city, state, country and territory in descending order of number of employees. The number of workforce in the country of USA is the highest among them with the workforce of 6.

NUMBERS OF EMPLOYEES ACCORDING TO JOB TITLE

	jobTitle	No_of_Employees
1	President	1
2	Sale Manager (EMEA)	1
3	VP Sales	1
4	Sales Manager (NA)	1
5	VP Marketing	1
6	Sales Manager (APAC)	1
7	Sales Rep	17

```
SELECT JOBTITLE, COUNT( EMPLOYEENUMBER) AS  
NO_OF_EMPLOYEES  
FROM EMPLOYEES  
GROUP BY JOBTITLE  
ORDER BY COUNT(EMPLOYEENUMBER) ASC;
```

We have 17 sales representatives which is the most assigned position and apart from that, 1 employee for each position.

EMPLOYEES AND THEIR POSITION AND WHERE THEY ARE LOCATED

	employeeNumber	jobTitle	officeCode	city
1	1002	President	1	San Francisco
2	1056	VP Sales	1	San Francisco
3	1076	VP Marketing	1	San Francisco
4	1143	Sales Manager (NA)	1	San Francisco
5	1165	Sales Rep	1	San Francisco
6	1166	Sales Rep	1	San Francisco
7	1188	Sales Rep	2	Boston
8	1216	Sales Rep	2	Boston
9	1286	Sales Rep	3	NYC
10	1323	Sales Rep	3	NYC
11	1102	Sale Manager (EMEA)	4	Paris
12	1337	Sales Rep	4	Paris
13	1370	Sales Rep	4	Paris
14	1401	Sales Rep	4	Paris
15	1702	Sales Rep	4	Paris
16	1621	Sales Rep	5	Tokyo
17	1625	Sales Rep	5	Tokyo
18	1088	Sales Manager (APAC)	6	Sydney
19	1611	Sales Rep	6	Sydney
20	1612	Sales Rep	6	Sydney
21	1619	Sales Rep	6	Sydney
22	1501	Sales Rep	7	London
23	1504	Sales Rep	7	London

```
SELECT E.EMPLOYEENUMBER, E.JOBTITLE,  
O.OFFICECODE, O.CITY  
FROM EMPLOYEES AS E  
INNER JOIN OFFICES AS O  
ON E.OFFICECODE = O.OFFICECODE;
```



This sql code shows that the position of the employees and which office they are working in and which city they are working.

NUMBER OF CUSTOMERS SOLD BY EACH SALEPERSON

```
SELECT COUNT(C.SALESREPEMPLOYEENUMBER) AS  
NO_OF_CUSTOMERS_SOLD,  
C.SALESREPEMPLOYEENUMBER, E.FIRSTNAME,  
E.LASTNAME  
FROM CUSTOMERS AS C  
INNER JOIN EMPLOYEES AS E  
ON C.SALESREPEMPLOYEENUMBER = E.  
EMPLOYEENUMBER  
GROUP BY SALESREPEMPLOYEENUMBER  
ORDER BY COUNT(C.SALESREPEMPLOYEENUMBER)  
DESC;
```

	No_of_customers_sold	salesRepEmployeeNumber	FirstName	LastName
1	10	1401	Pamela	Castillo
2	9	1504	Barry	Jones
3	8	1323	George	Vanauf
4	8	1501	Larry	Bott
5	7	1286	Foon Yue	Tseng
6	7	1370	Gerard	Hernandez
7	6	1165	Leslie	Jennings
8	6	1188	Julie	Firrelli
9	6	1337	Loui	Bondur
10	6	1702	Martin	Gerard
11	6	1166	Leslie	Thompson
12	6	1216	Steve	Patterson
13	5	1612	Peter	Marsh
14	5	1611	Andy	Fixter
15	5	1621	Mami	Nishi



From here, HR department can see which sales employees have done great performance and reward them.

From customer table

sLine2	city	state	postalCode	country	salesRepEmployeeNumber	creditLimit
	Nantes	null	44000	France	1370	21000.00
	Las Vegas	NV	83030	USA	1166	71800.00
	Melbourne	Victoria	3004	Australia	1611	117300.00
	Nantes	null	44000	France	1370	118200.00
	Stavern	null	4110	Norway	1504	81700.00
	San Rafael	CA	97562	USA	1165	210500.00
	Warszawa	null	01-012	Poland	null	0.00
	Frankfurt	null	60528	Germany	1504	59700.00
	San Francisco	CA	94217	USA	1165	64600.00
	NYC	NY	10022	USA	1323	114900.00
	Madrid	null	28034	Spain	1370	227600.00
	Luleå	null	S-958 22	Sweden	1504	53100.00
	Kobenhavn	null	1734	Denmark	1401	83400.00
	Lyon	null	69004	France	1337	123900.00
apt. 3/6 Tesvikiye 00	Singapore	null	079903	Singapore	1621	103800.00
	NYC	NY	10022	USA	1286	138500.00
	Allentown	PA	70267	USA	1216	100600.00
	Burlingame	CA	94217	USA	1165	84600.00
or Sentrum 01	Singapore	null	069045	Singapore	1612	97900.00
	Bergen	null	N 5804	Norway	1504	96800.00
	New Haven	CT	97823	USA	1286	0.00
	Lisboa	null	1756	Portugal	null	0.00
	Lille	null	59000	France	1370	82900.00
	Paris	null	75012	France	1337	84300.00

FK



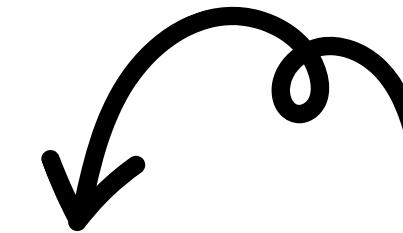
From employee table

employeeNumber	lastName	firstName	extension	email	officeCode	reportsTo	
1002	Murphy	Diane	x5800	dmurphy@classicmodelcars.com	1	null	
2	1056	Patterson	x4611	mpatterso@classicmodelcars.com	1	1002	
3	1076	Firrelli	Jeff	x9273	jfirrelli@classicmodelcars.com	1	1002
4	1088	Patterson	William	x4871	wpatterson@classicmodelcars.com	6	1056
5	1102	Bondur	Gerard	x5408	gbondur@classicmodelcars.com	4	1056
6	1143	Bow	Anthony	x5428	abow@classicmodelcars.com	1	1056
7	1165	Jennings	Leslie	x3291	ljennings@classicmodelcars.com	1	1143
8	1166	Thompson	Leslie	x4065	lthompson@classicmodelcars.com	1	1143
9	1188	Firrelli	Julie	x2173	jfirrelli@classicmodelcars.com	2	1143
10	1216	Patterson	Steve	x4334	spatterson@classicmodelcars.com	2	1143
11	1286	Tseng	Foon Yue	x2248	ftseng@classicmodelcars.com	3	1143
12	1323	Vanauf	George	x4102	gvanauf@classicmodelcars.com	3	1143
13	1337	Bondur	Lou	x6493	lbondur@classicmodelcars.com	4	1102
14	1370	Hernandez	Gerard	x2028	ghernande@classicmodelcars.com	4	1102
15	1401	Castillo	Pamela	x2759	pcastillo@classicmodelcars.com	4	1102
16	1501	Bott	Larry	x2311	lbott@classicmodelcars.com	7	1102
17	1504	Jones	Barry	x102	bjones@classicmodelcars.com	7	1102
18	1611	Fixter	Andy	x101	afixter@classicmodelcars.com	6	1088
19	1612	Marsh	Peter	x102	pmarsh@classicmodelcars.com	6	1088
20	1619	King	Tom	x103	tking@classicmodelcars.com	6	1088
21	1621	Nishi	Mami	x101	mnishi@classicmodelcars.com	5	1056
22	1625	Kato	Yoshimi	x102	ykato@classicmodelcars.com	5	1621
23	1702	Gerard	Martin	x2312	mgerard@classicmodelcars.com	4	1102

PK

EMPLOYEES AND TO WHOM THEY REPORT

```
SELECT  
EMPLOYEENUMBER, LASTNAME,  
FIRSTNAME, REPORTSTO,  
JOBTITLE  
FROM EMPLOYEES;
```



IT IS A VERY USEFUL TABLE FOR THE
HR DEPARTMENT AS WE CAN SEE THE
EMPLOYEE NUMBER, THEIR NAMES,
AND JOBTITLE. IN ADDITION, WE CAN
ALSO NOTICE WHICH EMPLOYEE HAS
TO REPORT TO WHOM.

	employeeNumber	lastname	firstname	reportsTo	jobTitle
1	1002	Murphy	Diane	null	President
2	1056	Patterson	Mary	1002	VP Sales
3	1076	Firrelli	Jeff	1002	VP Marketing
4	1088	Patterson	William	1056	Sales Manager (APAC)
5	1102	Bondur	Gerard	1056	Sale Manager (EMEA)
6	1143	Bow	Anthony	1056	Sales Manager (NA)
7	1165	Jennings	Leslie	1143	Sales Rep
8	1166	Thompson	Leslie	1143	Sales Rep
9	1188	Firrelli	Julie	1143	Sales Rep
10	1216	Patterson	Steve	1143	Sales Rep
11	1286	Tseng	Foon Yue	1143	Sales Rep
12	1323	Vanauf	George	1143	Sales Rep
13	1337	Bondur	Loui	1102	Sales Rep
14	1370	Hernandez	Gerard	1102	Sales Rep
15	1401	Castillo	Pamela	1102	Sales Rep
16	1501	Bott	Larry	1102	Sales Rep
17	1504	Jones	Barry	1102	Sales Rep
18	1611	Fixter	Andy	1088	Sales Rep
19	1612	Marsh	Peter	1088	Sales Rep
20	1619	King	Tom	1088	Sales Rep
21	1621	Nishi	Mami	1056	Sales Rep
22	1625	Kato	Yoshimi	1621	Sales Rep
23	1702	Gerard	Martin	1102	Sales Rep

Export files both JSON and CSV for employees table

JSON



The screenshot shows a Windows Notepad window titled "employees(1) - Notepad". The content is a JSON array representing the employees table from the classicmodels database. The array starts with a header object and then lists 17 rows of employee data, each containing properties like employeeNumber, lastName, firstName, extension, email, officeCode, reportsTo, and jobTitle.

```
[{"type": "header", "version": "5.2.1", "comment": "Export to JSON plugin for PHPMyAdmin"}, {"type": "database", "name": "classicmodels"}, {"type": "table", "name": "employees", "database": "classicmodels", "data": [{"employeeNumber": "1002", "lastName": "Murphy", "firstName": "Diane", "extension": "x5800", "email": "dmurphy@classicmodelcars.com", "officeCode": "1", "reportsTo": null}, {"employeeNumber": "1056", "lastName": "Patterson", "firstName": "Mary", "extension": "x4611", "email": "mpatterso@classicmodelcars.com", "officeCode": "1", "reportsTo": null}, {"employeeNumber": "1076", "lastName": "Firrelli", "firstName": "Jeff", "extension": "x9273", "email": "jfиррели@classicmodelcars.com", "officeCode": "1", "reportsTo": null}, {"employeeNumber": "1088", "lastName": "Patterson", "firstName": "William", "extension": "x4871", "email": "wpatterson@classicmodelcars.com", "officeCode": "6", "reportsTo": null}, {"employeeNumber": "1102", "lastName": "Bondur", "firstName": "Gerard", "extension": "x5408", "email": "gbondur@classicmodelcars.com", "officeCode": "4", "reportsTo": "1056"}, {"employeeNumber": "1143", "lastName": "Bow", "firstName": "Anthony", "extension": "x5428", "email": "abow@classicmodelcars.com", "officeCode": "1", "reportsTo": "1056"}, {"employeeNumber": "1165", "lastName": "Jennings", "firstName": "Leslie", "extension": "x3291", "email": "ljenning@classicmodelcars.com", "officeCode": "1", "reportsTo": null}, {"employeeNumber": "1166", "lastName": "Thompson", "firstName": "Leslie", "extension": "x4065", "email": "lthompson@classicmodelcars.com", "officeCode": "1", "reportsTo": null}, {"employeeNumber": "1188", "lastName": "Firrelli", "firstName": "Julie", "extension": "x2173", "email": "jfиррели@classicmodelcars.com", "officeCode": "2", "reportsTo": null}, {"employeeNumber": "1216", "lastName": "Patterson", "firstName": "Steve", "extension": "x4334", "email": "spatterson@classicmodelcars.com", "officeCode": "2", "reportsTo": null}, {"employeeNumber": "1286", "lastName": "Tseng", "firstName": "Foon Yue", "extension": "x2248", "email": "ftseng@classicmodelcars.com", "officeCode": "3", "reportsTo": "11"}, {"employeeNumber": "1323", "lastName": "Vanauf", "firstName": "George", "extension": "x4102", "email": "gvanauf@classicmodelcars.com", "officeCode": "3", "reportsTo": "11"}, {"employeeNumber": "1337", "lastName": "Bondur", "firstName": "Loui", "extension": "x6493", "email": "lbondur@classicmodelcars.com", "officeCode": "4", "reportsTo": "1102"}, {"employeeNumber": "1370", "lastName": "Hernandez", "firstName": "Gerard", "extension": "x2028", "email": "ghernande@classicmodelcars.com", "officeCode": "4", "reportsTo": null}, {"employeeNumber": "1401", "lastName": "Castillo", "firstName": "Pamela", "extension": "x2759", "email": "pcastillo@classicmodelcars.com", "officeCode": "4", "reportsTo": null}, {"employeeNumber": "1501", "lastName": "Bott", "firstName": "Larry", "extension": "x2311", "email": "lbott@classicmodelcars.com", "officeCode": "7", "reportsTo": "1102"}, {"employeeNumber": "1504", "lastName": "Jones", "firstName": "Barry", "extension": "x102", "email": "bjones@classicmodelcars.com", "officeCode": "7", "reportsTo": "1102"}, {"employeeNumber": "1611", "lastName": "Fixter", "firstName": "Andy", "extension": "x101", "email": "afixter@classicmodelcars.com", "officeCode": "6", "reportsTo": "1088"}, {"employeeNumber": "1612", "lastName": "Marsh", "firstName": "Peter", "extension": "x102", "email": "pmarsh@classicmodelcars.com", "officeCode": "6", "reportsTo": "1088"}, {"employeeNumber": "1619", "lastName": "King", "firstName": "Tom", "extension": "x103", "email": "tking@classicmodelcars.com", "officeCode": "6", "reportsTo": "1088"}, {"employeeNumber": "1621", "lastName": "Nishi", "firstName": "Mami", "extension": "x101", "email": "mnishi@classicmodelcars.com", "officeCode": "5", "reportsTo": "1056"}, {"employeeNumber": "1625", "lastName": "Kato", "firstName": "Yoshimi", "extension": "x102", "email": "ykato@classicmodelcars.com", "officeCode": "5", "reportsTo": "1621"}, {"employeeNumber": "1702", "lastName": "Gerard", "firstName": "Martin", "extension": "x2312", "email": "mgerard@classicmodelcars.com", "officeCode": "4", "reportsTo": "1102"}]
```

CSV

employeeNumber	lastName	firstName	extension	email	officeCode	reportsTo	jobTitle
1002	Murphy	Diane	x5800	dmurphy@classicmodelcars.com	1	NULL	President
1056	Patterson	Mary	x4611	mpatterso@classicmodelcars.com	1	1002	VP Sales
1076	Firrelli	Jeff	x9273	jfirrelli@classicmodelcars.com	1	1002	VP Marketing
1088	Patterson	William	x4871	wpatterson@classicmodelcars.com	6	1056	Sales Manager
1102	Bondur	Gerard	x5408	gbondur@classicmodelcars.com	4	1056	Sales Manager
1143	Bow	Anthony	x5428	abow@classicmodelcars.com	1	1056	Sales Manager
1165	Jennings	Leslie	x3291	ljenning@classicmodelcars.com	1	1143	Sales Rep
1166	Thompson	Leslie	x4065	lthompson@classicmodelcars.com	1	1143	Sales Rep
1188	Firrelli	Julie	x2173	jfirrelli@classicmodelcars.com	2	1143	Sales Rep
1216	Patterson	Steve	x4334	spatterson@classicmodelcars.com	2	1143	Sales Rep
1286	Tseng	Foon Yue	x2248	ftseng@classicmodelcars.com	3	1143	Sales Rep
1323	Vanauf	George	x4102	gvanauf@classicmodelcars.com	3	1143	Sales Rep
1337	Bondur	Loui	x6493	lbondur@classicmodelcars.com	4	1102	Sales Rep
1370	Hernandez	Gerard	x2028	ghernande@classicmodelcars.com	4	1102	Sales Rep
1401	Castillo	Pamela	x2759	pcastillo@classicmodelcars.com	4	1102	Sales Rep
1501	Bott	Larry	x2311	lbott@classicmodelcars.com	7	1102	Sales Rep
1504	Jones	Barry	x102	bjones@classicmodelcars.com	7	1102	Sales Rep
1611	Fixter	Andy	x101	afixter@classicmodelcars.com	6	1088	Sales Rep
1612	Marsh	Peter	x102	pmarsh@classicmodelcars.com	6	1088	Sales Rep
1619	King	Tom	x103	tking@classicmodelcars.com	6	1088	Sales Rep
1621	Nishi	Mami	x101	mnishi@classicmodelcars.com	5	1056	Sales Rep
1625	Kato	Yoshimi	x102	ykato@classicmodelcars.com	5	1621	Sales Rep
1702	Gerard	Martin	x2312	mgerard@classicmodelcars.com	4	1102	Sales Rep

JSON result

Data Model (Employees)

CONVERT

 JSON “ ” ⌂ ⌄ ⌅ ⌆ ⌇ ⌈ ⌉

```
1 { "employeeNumber": 1003,
2   "Name": {
3     "Title": "Mr",
4     "Firstname": "AA",
5     "Lastname": "BB" },
6   "extension": "x5800",
7   "email": "aabb@gmail.com",
8   "Office": {
9     "officeCode": 1,
10    "Phone": "+091122334455",
11    "Addressline1": "100 Market Street",
12    "Addressline 2": "Sutie 300",
13    "Location": {
14      "City": "San Francisco",
15      "State": "CA",
16      "Country": "USA",
17      "PostalCode": 94080,
18      "Territory": "N/A" } },
19   "reportsTo": 1002,
20   "Jobtitle": "VP Sales"}
```

The screenshot shows a table with four columns: name, type, constraint, and term. The rows represent columns in a database table named 'Name'. The first row has 'name' as 'NameId', 'type' as 'int', 'constraint' as 'PK', and 'term' as 'Name'. The second row has 'name' as 'Title', 'type' as 'varchar', and 'term' as 'Title'. The third row has 'name' as 'Firstname', 'type' as 'varchar', and 'term' as 'Firstname'. The fourth row has 'name' as 'Lastname', 'type' as 'varchar', and 'term' as 'Lastname'. Each column header and row label is bolded.

name	type	constraint	term
Nameld	int	PK	Name
Title	varchar		Title
Firstname	varchar		Firstname
Lastname	varchar		Lastname

Rows per page: 10 < 1-4 of 4 >

The screenshot shows a table structure for the 'Office' table. The columns are labeled 'name', 'type', 'constraint', and 'term'. The rows are as follows:

name	type	constraint	term
Officeld	int	PK	Office
officeCode	int		Office Code
Phone	int		Phone
Addressline1	varchar		Addressline1
Addressline 2	varchar		Addressline 2
LocationId	int	FK	Location

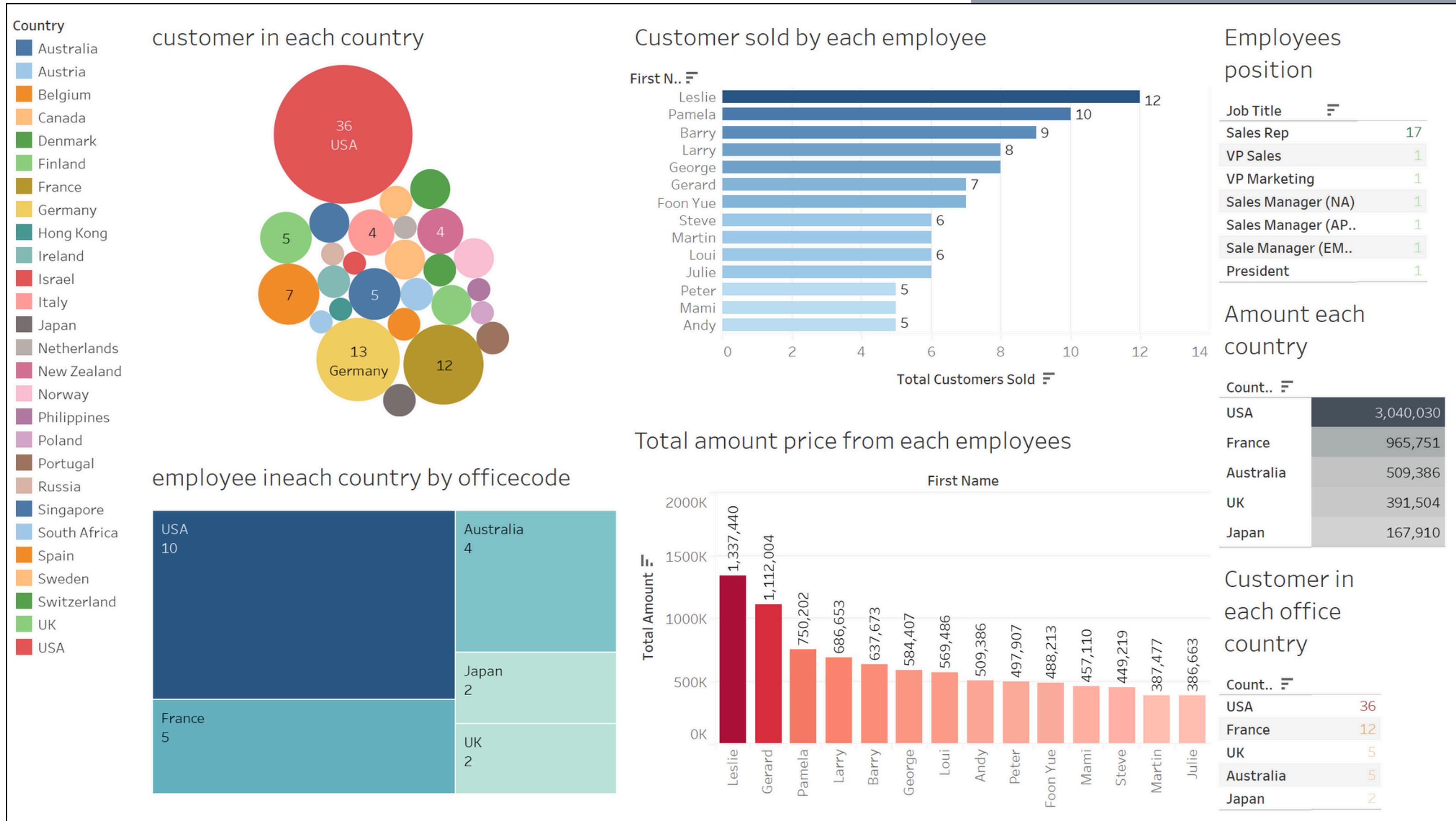
The screenshot shows a mobile application interface with a header containing three icons: a green up arrow, a red down arrow, and a blue grid. The title "Location (6)" is displayed next to the icons. Below the header is a search bar with the placeholder "Search" and a magnifying glass icon. The main content area is a table with six rows, each representing a field in a database table. The columns are labeled "name", "type", "constraint", and "term". The rows are as follows:

name	type	constraint	term
LocationId	int	PK	Location
City	varchar		City
State	varchar		State
Country	varchar		Country
PostalCode	int		Postal Code
Territory	varchar		Territory

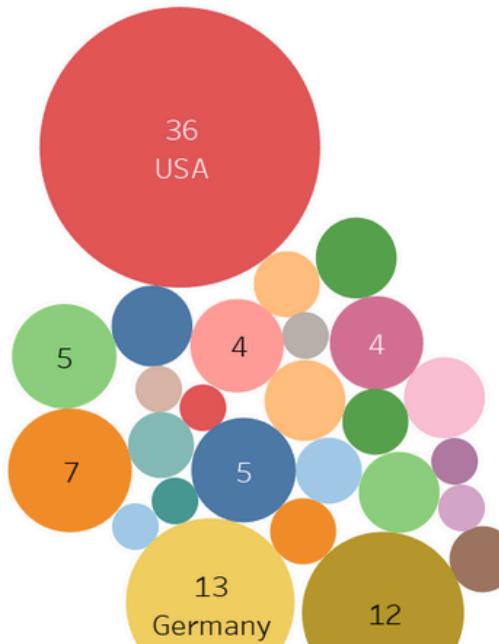
The screenshot shows a mobile application interface with a header bar containing icons for navigation and a title "Employees (8)". Below the header is a search bar with a magnifying glass icon. The main content is a table with the following columns: name, type, constraint, and term. The rows represent different fields:

name	type	constraint	term
EmployeesId	int	PK	Employees
employeeNumber	int		Employee Number
Nameld	int	FK	Name
extension	varchar		Extension
email	varchar		Email
Officeld	int	FK	Office
reportsto	int		Reportsto

DATA VISUALIZATION (TABLEAU)



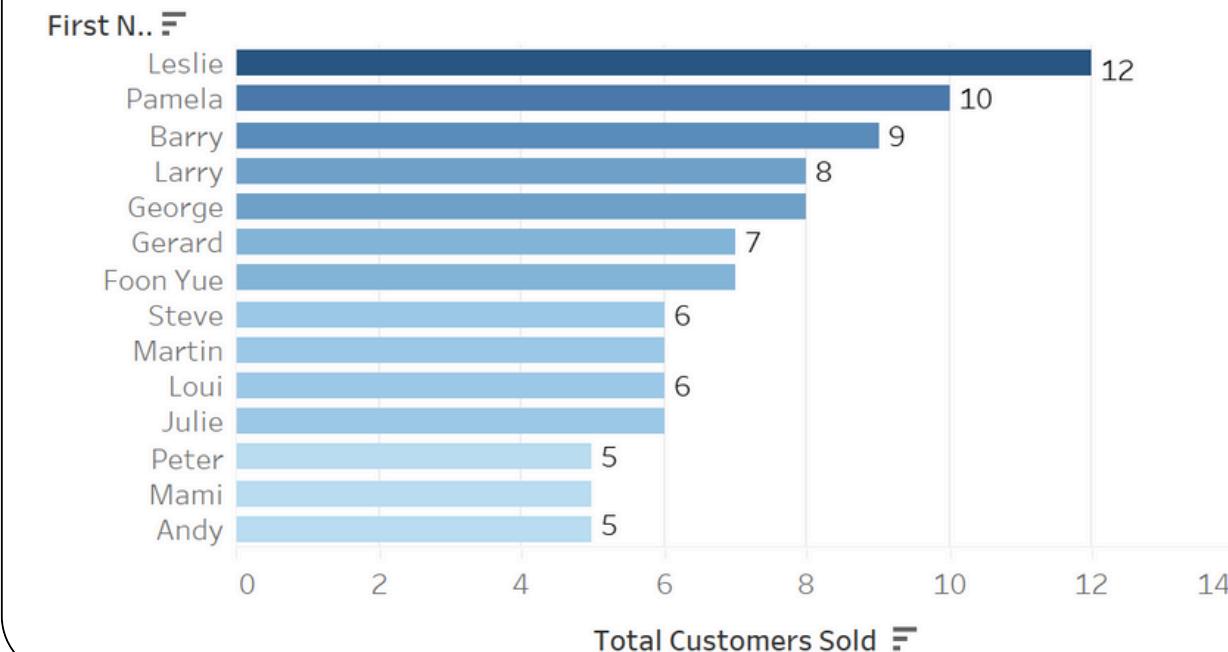
customer in each country



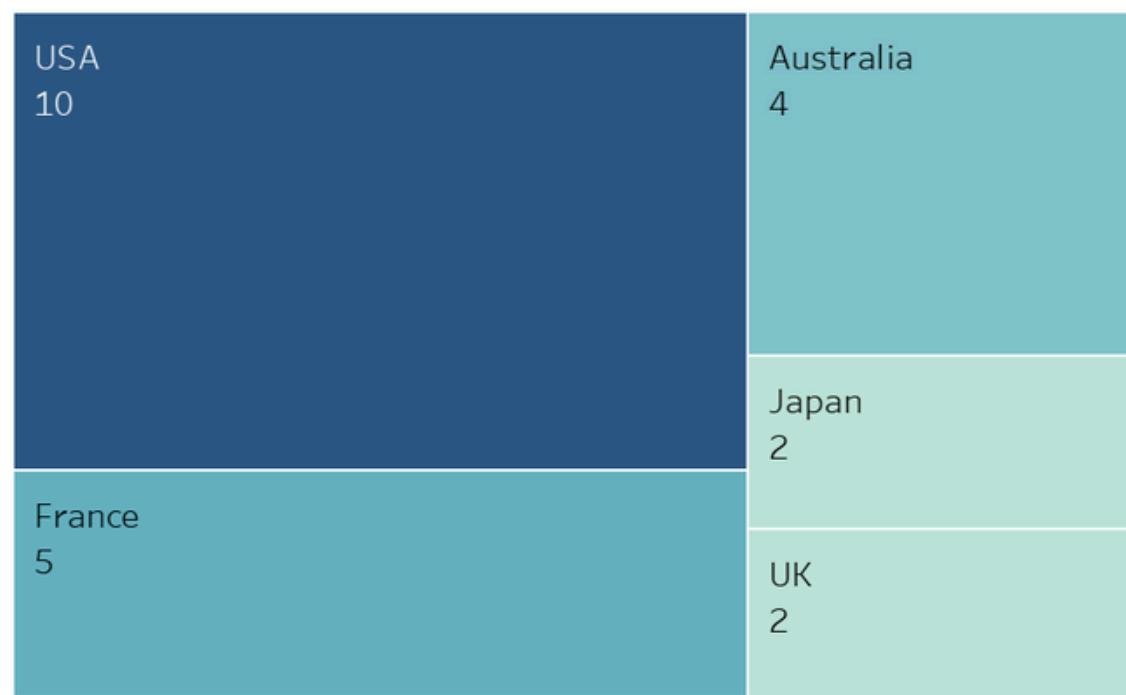
The graph shows the number of customer in each country



Customer sold by each employee



employee in each country by officecode

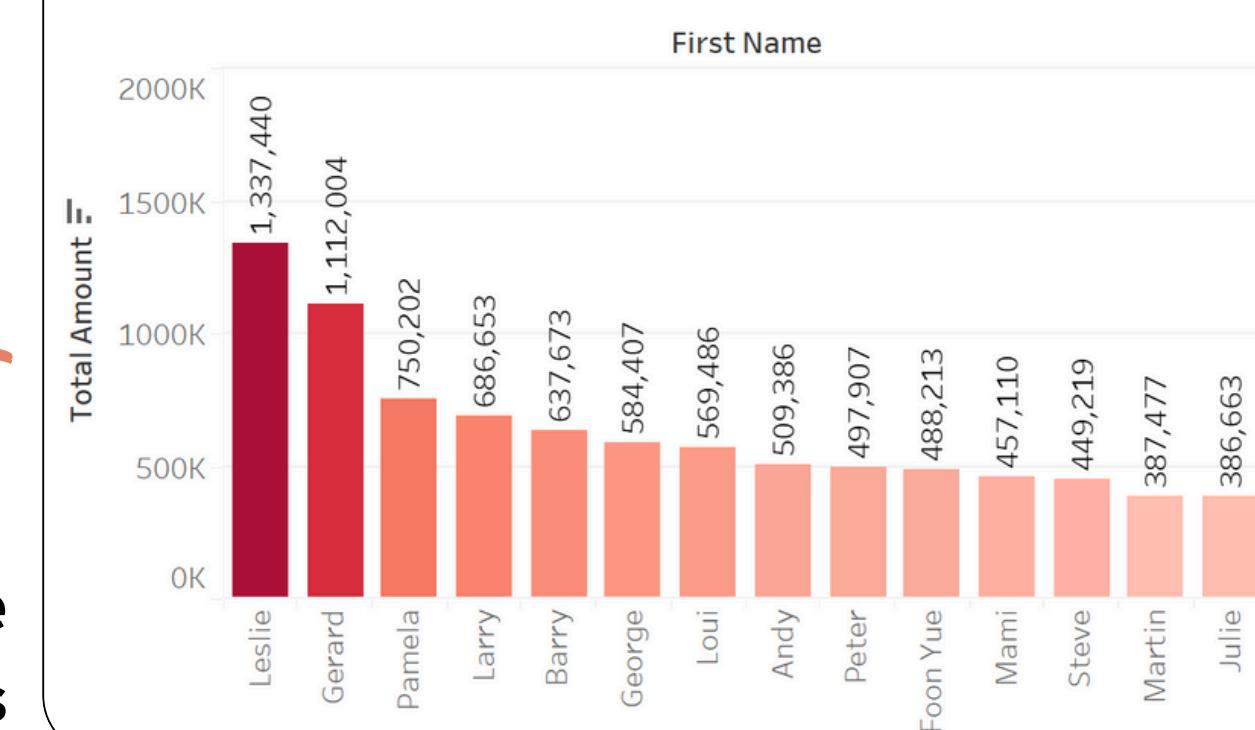


The graph shows the number of employees in each country according to officeCode.

*officeCode is the number indicate the country
EX. 1 is USA, 7 is UK



Total amount price from each employees



Employees position

Job Title	Count..
Sales Rep	17
VP Sales	1
VP Marketing	1
Sales Manager (NA)	1
Sales Manager (AP..	1
Sale Manager (EM..	1
President	1

The graph shows the number of employees in each position

Amount each country

Country	Amount
USA	3,040,030
France	965,751
Australia	509,386
UK	391,504
Japan	167,910

The graph shows the total sales price in each country

Customer in each office country

Country	Count..
USA	36
France	12
UK	5
Australia	5
Japan	2

The graph shows the number of customers in each country according to officeCode.

*officeCode is the number indicate the country EX. 1 is USA, 7 is UK

SUMMARY (TABLEAU)

CREATE COMPANY IN GERMANY

AS YOU SEE IN THE GRAPH(CUSTOMER IN EACH COUNTRY) IT DOESN'T HAVE OFFICES IN GERMANY BUT WE HAVE 13 PEOPLE CUSTOMERS SO WE SHOULD CREATE THE COMPANY IN GERMANY IT WOULD BE BETTER. HOWEVER, BEFORE ESTABLISH MORE COMPANY IN GERMANY WE SHOULD FOCUS ON SALES FIRST WHICH THIS COUNTRY HAVE THE HIGH SALE OR NOT.

CUSTOMER SOLD BY EACH EMPLOYEES AND SALES PRICE

IN THE GRAPH(CUSTOMER SALES BY EACH EMPLOYEE) WE SEE ANDY SOLD JUST 5 PEOPLE WHICH IS LESS BUT IN GRAPH(TOTAL AMOUNT PRICE FROM EACH EMPLOYEES) SHOW SALES OF ANDY IS 509,386 WHICH IS IN THE MIDDLE. AS RESULT, HIGH NUMBER OF CUSTOMER DOESN'T MEAN HAVE HIGH SALES PRICE. HOWEVER, THIS SECTION CAN BE USED TO EVALUATE EACH EMPLOYEE TO SEE WHICH ONES SHOULD BE DEVELOPED BASED ON THEIR OWN SALES.

Thank You