

DataBase 1

#	customer_id	first_name	last_name	birth_date	phone	address	city	state	points
1	1	Babara	MacCaffrey	1986-03-28	781-932-9754	0 Sage Terrace	Waltham	MA	2273
2	2	Ines	Brushfield	1986-04-13	804-427-9456	14187 Commercial Trail	Hampton	VA	947
3	3	Freddi	Boagey	1985-02-07	719-724-7869	251 Springs Junction	Colorado Springs	CO	2967
4	4	Ambur	Roseburgh	1974-04-14	407-231-8017	30 Arapahoe Terrace	Orlando	FL	457
5	5	Clemmie	Betchley	1973-11-07	NULL	5 Spohn Circle	Arlington	TX	3675
6	6	Elka	Twiddell	1991-09-04	312-480-8498	7 Manley Drive	Chicago	IL	3073
7	7	Ilene	Dowson	1964-08-30	615-641-4759	50 Lillian Crossing	Nashville	TN	1672
8	8	Thacher	Naseby	1993-07-17	941-527-3977	538 Mosinee Center	Sarasota	FL	205
9	9	Romola	Rumgay	1992-05-23	559-181-3744	3520 Ohio Trail	Visalia	CA	1486
10	10	Levy	Mynett	1969-10-13	404-246-3370	68 Lawn Avenue	Atlanta	GA	796
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Customers

#	order_id	customer_id	order_date	status	comments	shipped_date	shipper_id
1	1	6	2019-01-30	1	NULL	NULL	NULL
2	2	7	2018-08-02	2	NULL	2018-08-03	4
3	3	8	2017-12-01	1	NULL	NULL	NULL
4	4	2	2017-01-22	1	NULL	NULL	NULL
5	5	5	2017-08-25	2		2017-08-26	3
6	6	10	2018-11-18	1	Aliquam erat volutpat. In congue.	NULL	NULL
7	7	2	2018-09-22	2	NULL	2018-09-23	4
8	8	5	2018-06-08	1	Mauris enim leo, rhoncus sed, vesti...	NULL	NULL
9	9	10	2017-07-05	2	Nulla mollis molestie lorem. Quisqu...	2017-07-06	1
10	10	6	2018-04-22	2	NULL	2018-04-23	2
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Orders

#	shipper_id	name
1	1	Hettinger LLC
2	2	Schinner-Predovic
3	3	Satterfield LLC
4	4	Mraz, Renner and Nolan
5	5	Waters, Mayert and Prohaska
*	NULL	NULL

Shippers

#	order_id	product_id	quantity	unit_price
1	1	4	4	3.74
2	2	1	2	9.10
3	2	4	4	1.66
4	2	6	2	2.94
5	3	3	10	9.12
6	4	3	7	6.99
7	4	10	7	6.40
8	5	2	3	9.89
9	6	1	4	8.65
10	6	2	4	3.28
11	6	3	4	7.46
12	6	5	1	3.45
13	7	3	7	9.17
14	8	5	2	6.94
15	8	8	2	8.59

Order items

OUTPUTS:

#	customer_id	first_name	last_name	phone	order_id
1	7	Ilene	Dowson	615-641-4759	2
2	10	Levy	Mynett	404-246-3370	6
3	6	Elka	Twiddell	312-480-8498	10
4	5	Clemmie	Betchley	NULL	5
5	10	Levy	Mynett	404-246-3370	6
6	8	Thacher	Naseby	941-527-3977	3
7	2	Ines	Brushfield	804-427-9456	4
8	10	Levy	Mynett	404-246-3370	6
9	2	Ines	Brushfield	804-427-9456	7
10	6	Elka	Twiddell	312-480-8498	1
11	7	Ilene	Dowson	615-641-4759	2
12	10	Levy	Mynett	404-246-3370	6
13	5	Clemmie	Betchley	NULL	8
14	7	Ilene	Dowson	615-641-4759	2
15	10	Levy	Mynett	404-246-3370	9
16	5	Clemmie	Betchley	NULL	8
17	6	Elka	Twiddell	312-480-8498	10
18	2	Ines	Brushfield	804-427-9456	4

Left and Right Outer Join

#	first_name	name
1	Ambur	Hettinger LLC
2	Ambur	Schinner-Predovic
3	Ambur	Satterfield LLC
4	Ambur	Mraz, Renner and Nolan
5	Ambur	Waters, Mayert and Prohaska
6	Babara	Mraz, Renner and Nolan
7	Babara	Waters, Mayert and Prohaska
8	Babara	Hettinger LLC
9	Babara	Schinner-Predovic
10	Babara	Satterfield LLC
11	Clemmie	Hettinger LLC
12	Clemmie	Schinner-Predovic
13	Clemmie	Satterfield LLC
14	Clemmie	Mraz, Renner and Nolan
15	Clemmie	Waters, Mayert and Prohaska
16	Elka	Satterfield LLC
17	Elka	Mraz, Renner and Nolan
18	Elka	Schinner-Predovic
19	Elka	Hettinger LLC
20	Elka	Waters, Mayert and Prohaska
21	Freddi	Schinner-Predovic
22	Freddi	Satterfield LLC
23	Freddi	Mraz, Renner and Nolan
24	Freddi	Waters, Mayert and Prohaska
25	Freddi	Hettinger LLC
26	Ilene	Waters, Mayert and Prohaska
27	Ilene	Hettinger LLC
28	Ilene	Schinner-Predovic
29	Ilene	Satterfield LLC
30	Ilene	Mraz, Renner and Nolan
31	Ines	Waters, Mayert and Prohaska
32	Ines	Mraz, Renner and Nolan

Cross Join

#	first_name	last_name
1	Babara	MacCaffrey
2	Ines	Brushfield
3	Freddi	Boagey
4	Ambur	Roseburgh
5	Clemmie	Betchley
6	Elka	Twiddell
7	Ilene	Dowson
8	Thacher	Naseby
9	Romola	Rumgay
10	Levy	Mynett
11	1	Hettinger...
12	2	Schinner...
13	3	Satterfiel...
14	4	Mraz, Re...
15	5	Waters, ...

Union

DATABASE 2:

#	client_id	name	address	city	state	phone
1	1	Vinte	3 Nevada Parkway	Syracuse	NY	315-252-7305
2	2	Myworks	34267 Glendale Parkway	Huntington	WV	304-659-1170
3	3	Yadel	096 Pawling Parkway	San Francisco	CA	415-144-6037
4	4	Kwideo	81674 Westerfield Circle	Waco	TX	254-750-0784
5	5	Topiclounge	0863 Farmco Road	Portland	OR	971-888-9129
*	NULL	NULL	NULL	NULL	NULL	NULL

Clients

#	invoice_ic	number	client_ic	invoice_total	payment_total	invoice_date	due_date	payment_date
1	1	91-953-3396	2	101.79	0.00	2019-03-09	2019-03-29	NULL
2	2	03-898-6735	5	175.32	8.18	2019-06-11	2019-07-01	2019-02-12
3	3	20-228-0335	5	147.99	0.00	2019-07-31	2019-08-20	NULL
4	4	56-934-0748	3	152.21	0.00	2019-03-08	2019-03-28	NULL
5	5	87-052-3121	5	169.36	0.00	2019-07-18	2019-08-07	NULL
6	6	75-587-6626	1	157.78	74.55	2019-01-29	2019-02-18	2019-01-03
7	7	68-093-9863	3	133.87	0.00	2019-09-04	2019-09-24	NULL
8	8	78-145-1093	1	189.12	0.00	2019-05-20	2019-06-09	NULL
9	9	77-593-0081	5	172.17	0.00	2019-07-09	2019-07-29	NULL
10	10	48-266-1517	1	159.50	0.00	2019-06-30	2019-07-20	NULL
11	11	20-848-0181	3	126.15	0.03	2019-01-07	2019-01-27	2019-01-11
12	13	41-666-1035	5	135.01	87.44	2019-06-25	2019-07-15	2019-01-26
13	15	55-105-9605	3	167.29	80.31	2019-11-25	2019-12-15	2019-01-15
14	16	10-451-8824	1	162.02	0.00	2019-03-30	2019-04-19	NULL
15	17	33-615-4694	3	126.38	68.10	2019-07-30	2019-08-19	2019-01-15
16	18	52-269-9803	5	180.17	42.77	2019-05-23	2019-06-12	2019-01-08
17	19	83-559-4105	1	134.47	0.00	2019-11-23	2019-12-13	NULL
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Invoices

#	payment_method_id	name
1	1	Credit Card
2	2	Cash
3	3	PayPal
4	4	Wire Transfer
*	NULL	NULL

Payment Methods

#	payment_id	client_id	invoice_id	date	amount	payme
1	1	5	2	2019-02-12	8.18	1
2	2	1	6	2019-01-03	74.55	1
3	3	3	11	2019-01-11	0.03	1
4	4	5	13	2019-01-26	87.44	1
5	5	3	15	2019-01-15	80.31	1
6	6	3	17	2019-01-15	68.10	1
7	7	5	18	2019-01-08	32.77	1
8	8	5	18	2019-01-08	10.00	2
*	NULL	NULL	NULL	NULL	NULL	NULL

Payments

OUTPUTS:

#	date	payment_ic	invoice_ic	client_ic	amount	payment_method
1	2019-02-12	1	2	5	8.18	1
2	2019-01-03	2	6	1	74.55	1
3	2019-01-11	3	11	3	0.03	1
4	2019-01-26	4	13	5	87.44	1
5	2019-01-15	5	15	3	80.31	1
6	2019-01-15	6	17	3	68.10	1
7	2019-01-08	7	18	5	32.77	1
8	2019-01-08	8	18	5	10.00	2

Joins

#	date	amount	number	client_ic	payment_tota
1	2019-02-12	8.18	03-898-6735	5	8.18
2	2019-01-03	74.55	75-587-6626	1	74.55
3	2019-01-11	0.03	20-848-0181	3	0.03
4	2019-01-26	87.44	41-666-1035	5	87.44
5	2019-01-15	80.31	55-105-9605	3	80.31
6	2019-01-15	68.10	33-615-4694	3	68.10
7	2019-01-08	32.77	52-269-9803	5	42.77
8	2019-01-08	10.00	52-269-9803	5	42.77

Compound Joins

#	payment_ic	client_ic	date	name
1	1	5	2019-02-12	Credit Card
2	2	1	2019-01-03	Credit Card
3	3	3	2019-01-11	Credit Card
4	4	5	2019-01-26	Credit Card
5	5	3	2019-01-15	Credit Card
6	6	3	2019-01-15	Credit Card
7	7	5	2019-01-08	Credit Card
8	8	5	2019-01-08	Cash

Left Join

#	payment_id	client_id	date	name
1	1	5	2019-02-12	Credit Card
2	2	1	2019-01-03	Credit Card
3	3	3	2019-01-11	Credit Card
4	4	5	2019-01-26	Credit Card
5	5	3	2019-01-15	Credit Card
6	6	3	2019-01-15	Credit Card
7	7	5	2019-01-08	Credit Card
8	8	5	2019-01-08	Cash
9	NULL	NULL	NULL	PayPal
10	NULL	NULL	NULL	Wire Tra...

Right Join