

Домашнее задание №2

Примечание перед началом работы

Изначально таблица **transaction** содержит строки с customer id = 5034, которого, при этом, нет в таблице **customer**. В связи с этим, данные строки были удалены из таблицы **transaction** для корректной работы.

Скриншоты из DBeaver, подтверждающие загрузку данных

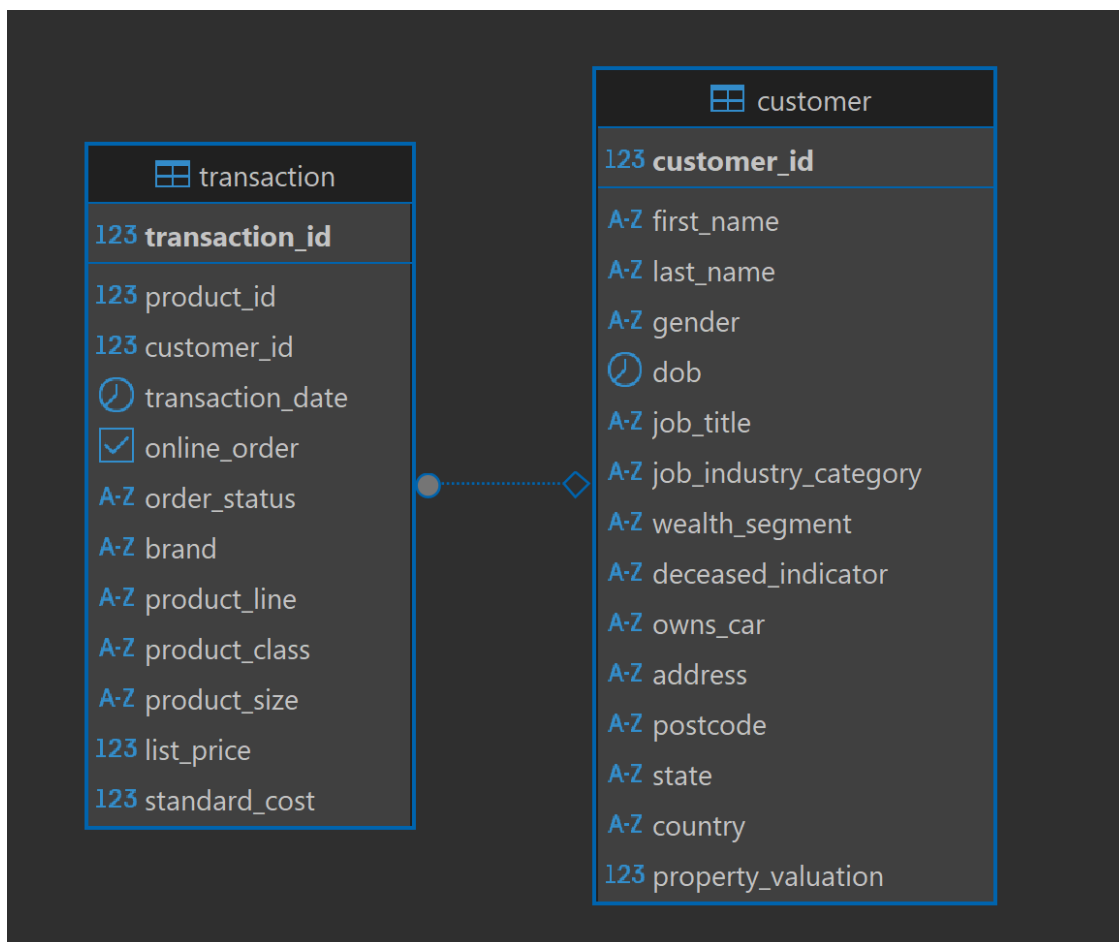
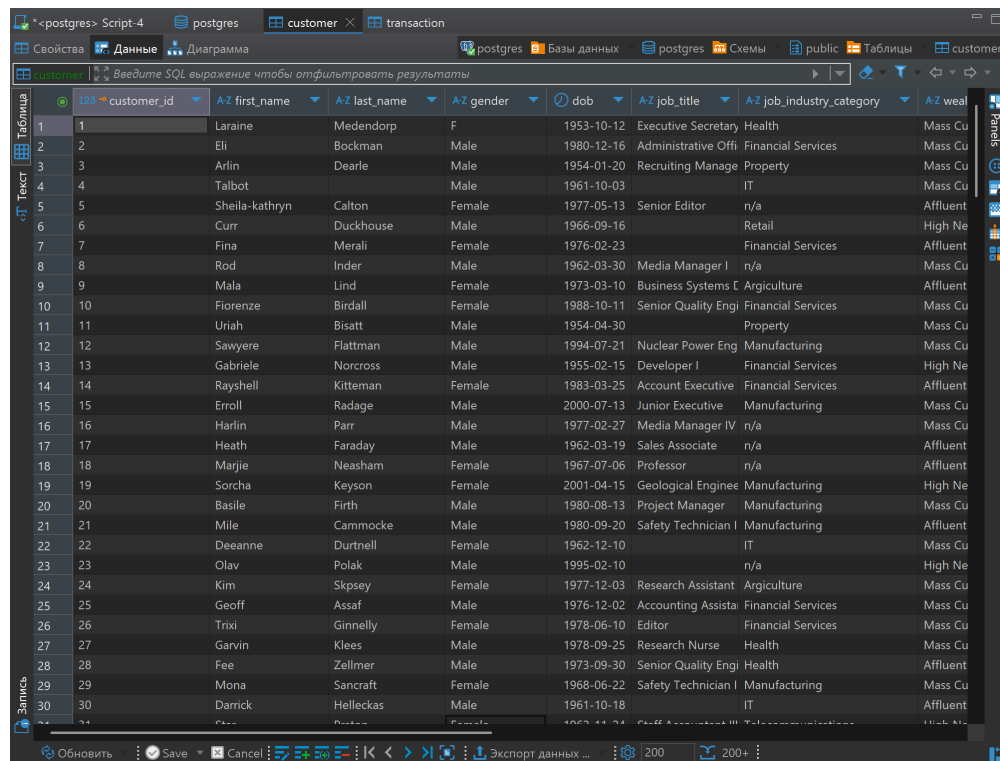
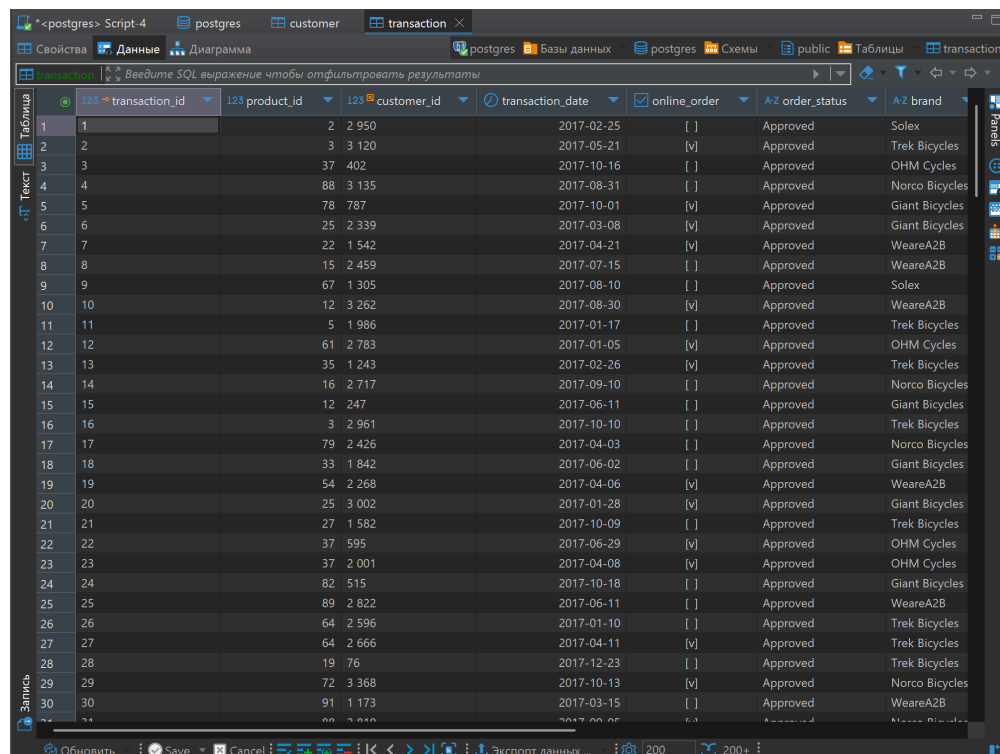


Рис. 1: Список таблиц в базе данных



customer_id	first_name	last_name	gender	dob	job_title	industry_category	wealth_status
1	Laraine	Medendorp	F	1953-10-12	Executive Secretary	Health	Mass Cu
2	Eli	Bockman	Male	1980-12-16	Administrative Offi	Financial Services	Mass Cu
3	Arlin	Dearle	Male	1954-01-20	Recruiting Manage	Property	Mass Cu
4	Talbot		Male	1961-10-03	IT		Mass Cu
5	Sheila-kathryn	Calton	Female	1977-05-13	Senior Editor	n/a	Affluent
6	Curr	Duckhouse	Male	1966-09-16		Retail	High Ne
7	Fina	Merali	Female	1976-02-23		Financial Services	Affluent
8	Rod	Inder	Male	1962-03-30	Media Manager I	n/a	Mass Cu
9	Mala	Lind	Female	1973-03-10	Business Systems T	Argiculture	Affluent
10	Fiorenze	Birdall	Female	1988-10-11	Senior Quality Engi	Financial Services	Mass Cu
11	Uriah	Bisatt	Male	1954-04-30		Property	Mass Cu
12	Sawyer	Flattman	Male	1994-07-21	Nuclear Power Eng	Manufacturing	Mass Cu
13	Gabriele	Norcross	Male	1955-02-15	Developer I	Financial Services	High Ne
14	Rayshell	Kitteman	Female	1983-03-25	Account Executive	Financial Services	Affluent
15	Erroll	Radage	Male	2000-07-13	Junior Executive	Manufacturing	Mass Cu
16	Harlin	Parr	Male	1977-02-27	Media Manager IV	n/a	Mass Cu
17	Heath	Faraday	Male	1962-03-19	Sales Associate	n/a	Affluent
18	Marjie	Neasham	Female	1967-07-06	Professor	n/a	Affluent
19	Sorcha	Keyson	Female	2001-04-15	Geological Enginee	Manufacturing	High Ne
20	Basile	Firth	Male	1980-08-13	Project Manager	Manufacturing	Mass Cu
21	Mile	Cammocke	Male	1980-09-20	Safety Technician I	Manufacturing	Affluent
22	Deeanne	Durtnell	Female	1962-12-10		IT	Mass Cu
23	Olav	Polak	Male	1995-02-10		n/a	High Ne
24	Kim	Skpsey	Female	1977-12-03	Research Assistant	Argiculture	Mass Cu
25	Geoff	Assaf	Male	1976-12-02	Accounting Assista	Financial Services	Mass Cu
26	Trixi	Ginnelly	Female	1978-06-10	Editor	Financial Services	Mass Cu
27	Garvin	Klees	Male	1978-09-25	Research Nurse	Health	Mass Cu
28	Fee	Zellmer	Male	1973-09-30	Senior Quality Engi	Health	Affluent
29	Mona	Sancraft	Female	1968-06-22	Safety Technician I	Manufacturing	Mass Cu
30	Darrick	Helleckas	Male	1961-10-18		IT	Affluent

Рис. 2: Таблица customer



transaction_id	product_id	customer_id	transaction_date	online_order	order_status	brand
1	2	2950	2017-02-25	[]	Approved	Solex
2	3	3120	2017-05-21	[v]	Approved	Trek Bicycles
3	37	402	2017-10-16	[]	Approved	OHM Cycles
4	88	3135	2017-08-31	[]	Approved	Norco Bicycles
5	78	787	2017-10-01	[v]	Approved	Giant Bicycles
6	25	2339	2017-03-08	[v]	Approved	Giant Bicycles
7	22	1542	2017-04-21	[v]	Approved	WeareA2B
8	15	2459	2017-07-15	[]	Approved	WeareA2B
9	67	1305	2017-08-10	[]	Approved	Solex
10	12	3262	2017-08-30	[v]	Approved	WeareA2B
11	5	1986	2017-01-17	[]	Approved	Trek Bicycles
12	61	2783	2017-01-05	[v]	Approved	OHM Cycles
13	35	1243	2017-02-26	[v]	Approved	Trek Bicycles
14	16	2717	2017-09-10	[]	Approved	Norco Bicycles
15	12	247	2017-06-11	[]	Approved	Giant Bicycles
16	3	2961	2017-10-10	[]	Approved	Trek Bicycles
17	79	2426	2017-04-03	[]	Approved	Norco Bicycles
18	33	1842	2017-06-02	[]	Approved	Giant Bicycles
19	54	2268	2017-04-06	[v]	Approved	WeareA2B
20	25	3002	2017-01-28	[v]	Approved	Giant Bicycles
21	27	1582	2017-10-09	[]	Approved	Trek Bicycles
22	37	595	2017-06-29	[v]	Approved	OHM Cycles
23	37	2001	2017-04-08	[v]	Approved	OHM Cycles
24	82	515	2017-10-18	[]	Approved	Giant Bicycles
25	89	2822	2017-06-11	[]	Approved	WeareA2B
26	64	2596	2017-01-10	[]	Approved	Trek Bicycles
27	64	2666	2017-04-11	[v]	Approved	Trek Bicycles
28	19	76	2017-12-23	[]	Approved	Trek Bicycles
29	72	3368	2017-10-13	[v]	Approved	Norco Bicycles
30	91	1173	2017-03-15	[]	Approved	WeareA2B

Рис. 3: Таблица transactions

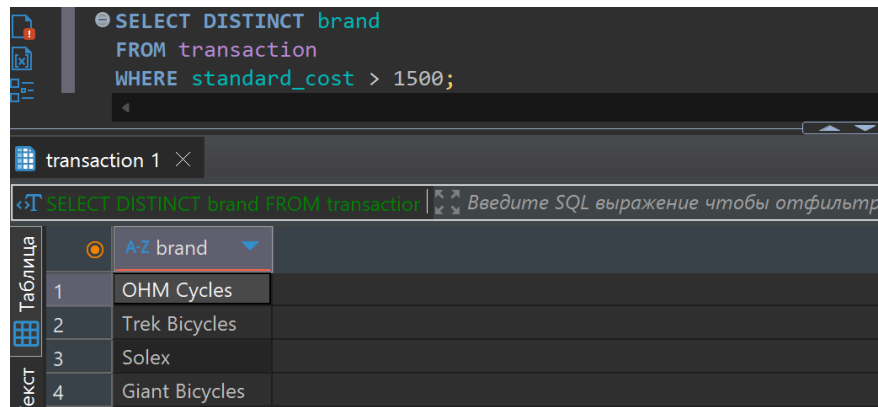


Рис. 4: Результат выполнения запроса 1

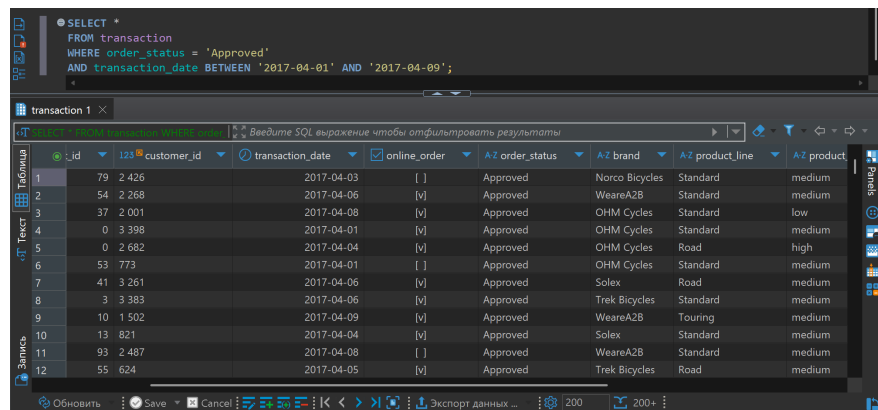


Рис. 5: Результат выполнения запроса 2

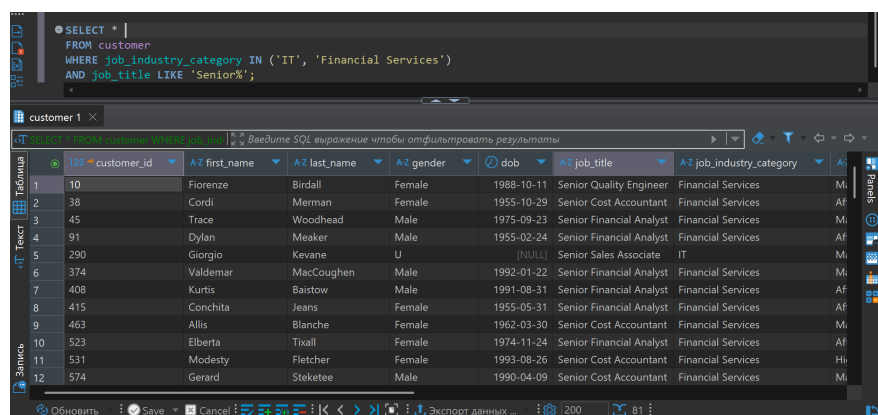


Рис. 6: Результат выполнения запроса 3

SQL Query:

```
SELECT DISTINCT t.brand
FROM transaction t
JOIN customer c ON t.customer_id = c.customer_id
WHERE c.job_industry_category = 'Financial Services';
```

transaction 1 X

Введите SQL выражение чтобы отфильтровать результаты

Таблица	A-Z brand
1	
2	Trek Bicycles
3	WeareA2B
4	Solex
5	Giant Bicycles
6	OHM Cycles
7	Norco Bicycles

Рис. 7: Результат выполнения запроса 4

SQL Query:

```
SELECT c.*
FROM customer c
JOIN transaction t ON c.customer_id = t.customer_id
WHERE t.online_order = 'True'
AND t.brand IN ('Giant Bicycles', 'Norco Bicycles', 'Trek Bicycles')
LIMIT 10;
```

customer 1 X

Введите SQL выражение чтобы отфильтровать результаты

Таблица	customer_id	A-Z first_name	A-Z last_name	A-Z gender	dob	A-Z job_title	A-Z job_industry_category
1	123	Lauree	O'Donnell	Female	1979-02-04	Clinical Specialist	Health
2	787	Norma	Batrim	Female	1996-12-15		Retail
3	2 339	Damien	Haddeston	Male	1958-12-28	Web Designer II	Property
4	1 243	Robbert	Blakey	Male	1953-08-09	Research Assistant II	Retail
5	3 002	Tracey	Verdun	Male	1956-12-06	Paralegal	Financial Services
6	2 666	Lyle	Eager	Male	1971-02-16	Occupational Therapist	Health
7	3 368	Tanya	Boddis	Female	1967-07-17	Technical Writer	Financial Services
8	2 810	Malvin	Burchill	Male	1961-08-26		Property
9	2 003	Lilli	Hargey	Female	1962-06-21	Statistician III	Manufacturing
10	2 448	Lorri	Iston	Female	1992-12-18	Structural Analysis Engineer	Property

Рис. 8: Результат выполнения запроса 5

SQL Query:

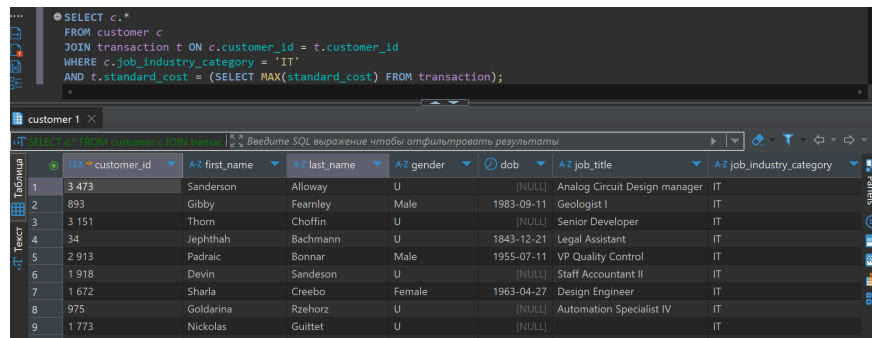
```
SELECT *
FROM customer
WHERE customer_id NOT IN (SELECT DISTINCT customer_id FROM transaction);
```

customer 1 X

Введите SQL выражение чтобы отфильтровать результаты

Таблица	customer_id	A-Z first_name	A-Z last_name	A-Z gender	dob	A-Z job_title	A-Z job_industry_category
1	852	Andie	Bonney	Female	2000-11-04	Compensation Analyst	Financial Services
2	869	Addia	Abels	Female	1984-03-11	Account Representative I	Financial Services
3	1 373	Shaylynn	Epsley	Female	1958-09-23	Director of Sales	Financial Services
4	3 072	Werner	Yglesias	Male	1987-05-25		IT
5	3 673	Tobin	Fucher	Male	1979-09-28		Manufacturing
6	2 074	Roslyn	Rawdall	Female	1997-06-11		Financial Services
7	2 660	Hunt	Scollard	Male	1963-11-15		Retail
8	3 229	Carrol	Gheorghie	Male	1964-10-18	Sales Representative	Retail
9	3 236	Edsel	Arguile	Male	1993-04-01		Manufacturing
10	3 501	Kayla	Alentyev	Female	1970-01-19	Operator	Telecommunications
11	3 502	Wilfrid	Cleaves	Male	1997-10-16	Senior Sales Associate	Retail
12	3 503	Tootsie	Rafter	Female	1979-03-12	Financial Advisor	Financial Services

Рис. 9: Результат выполнения запроса 6



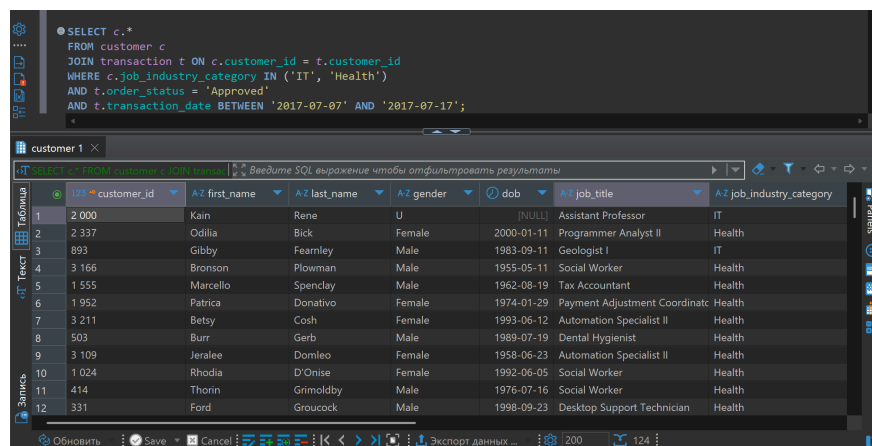
```

SELECT c.*
FROM customer c
JOIN transaction t ON c.customer_id = t.customer_id
WHERE c.job_industry_category = 'IT'
AND t.standard_cost = (SELECT MAX(standard_cost) FROM transaction);

```

	customer_id	first_name	last_name	gender	dob	job_title	job_industry_category
1	123	Sanderson	Alloway	U	[NULL]	Analog Circuit Design manager	IT
2	893	Gibby	Fearnley	Male	1983-09-11	Geologist I	IT
3	3 151	Thorn	Choffin	U	[NULL]	Senior Developer	IT
4	34	Jephthah	Bachmann	U	1843-12-21	Legal Assistant	IT
5	2 913	Padraic	Bonnar	Male	1955-07-11	VP Quality Control	IT
6	1 918	Devin	Sanderson	U	[NULL]	Staff Accountant II	IT
7	1 672	Sharla	Creebo	Female	1963-04-27	Design Engineer	IT
8	975	Goldarina	Rzehorz	U	[NULL]	Automation Specialist IV	IT
9	1 773	Nickolas	Guittet	U	[NULL]		IT

Рис. 10: Результат выполнения запроса 7



```

SELECT c.*
FROM customer c
JOIN transaction t ON c.customer_id = t.customer_id
WHERE c.job_industry_category IN ('IT', 'Health')
AND t.order_status = 'Approved'
AND t.transaction_date BETWEEN '2017-07-07' AND '2017-07-17';

```

	customer_id	first_name	last_name	gender	dob	job_title	job_industry_category
1	2 000	Kain	Rene	U	[NULL]	Assistant Professor	IT
2	2 337	Odilia	Bick	Female	2000-01-11	Programmer Analyst II	Health
3	893	Gibby	Fearnley	Male	1983-09-11	Geologist I	IT
4	3 166	Bronson	Plowman	Male	1955-05-11	Social Worker	Health
5	1 555	Marcello	Spencley	Male	1962-08-19	Tax Accountant	Health
6	1 952	Patrica	Donativo	Female	1974-01-29	Payment Adjustment Coordinatc	Health
7	3 211	Betsy	Cosh	Female	1993-06-12	Automation Specialist II	Health
8	503	Burr	Gerb	Male	1989-07-19	Dental Hygienist	Health
9	3 109	Jeralsee	Domleo	Female	1958-06-23	Automation Specialist II	Health
10	1 024	Rhodia	D'Onise	Female	1992-06-05	Social Worker	Health
11	414	Thorin	Grimoldby	Male	1976-07-16	Social Worker	Health
12	331	Ford	Groucock	Male	1998-09-23	Desktop Support Technician	Health

Рис. 11: Результат выполнения запроса 8