1.Query: Fetch all customer data with order (NEW)

Andrii Fedorenko
a1349252

```
select xmlroot(xmlelement(name "customer_data",
                xmlagg(
                    xmlelement(name "customer", xmlattributes(c.customer_id as customer_id, c.age as age),
            xmlforest(
                        c.last_name as last_name,
                        c.first_name as first_name,
                        c.gender as gender,
                        c.age as age,
                        c.title as title
                 ),
                                    xmlelement(name "order_details",
                                            (case when char_length(c.email)<21 then
                xmlforest(
                        c.email as email
                      ) else
                       xmlforest(
                        c.phone as phone
                       )
                                                end),
                    xmlelement(name "order_address",
                                    xmlforest(
                                     c.street as street,
                                     c.hause as house,
                                     c.flat as flat,
                                     c.gender as gender,
                                     c.porch as porch
                                      ),
                                    xmlelement(name "detailed_order_data", xmlattributes(c.postal_code as potal_code),
                                            xmlforest(
                                                c.country as country,
                                                c.city as city,
                                                c.continent as continent
                                                    ),
                                    xmlelement(name "customer_fridges_on_current_address",
                                            (SELECT xmlagg(
                                                    xmlelement(name "fridge", xmlattributes(f.fridge_id AS fridge_id, f.year_of_prod as year_of_production),
                                                    xmlforest(
                                                            f.type AS fridge_type,

                                                            f.color as fridge_color,
                                                            f.prod_country as prod_country,
                                                            f.volume as fridge_volume
                                                        )
                                                    )
                                                )
                                             FROM fridge as f WHERE c.fridge_id = f.fridge_id
                                            )
                                        )
                                    )
                                )
                            )
                    )
                ),
            version '1.0', standalone yes)
from (select DISTINCT c.fridge_id, c.customer_id, c.last_name, c.first_name, c.gender, c.age, c.title, c.email, c.phone,
            ca.street, ca.hause,ca.flat,ca.porch,
            pc.postal_code, pc.country, pc.city, pc.continent
            from customer as c
            JOIN customer_address as ca ON c.customer_id = ca.customer_id
            JOIN postal_code as pc ON ca.postal_code = pc.postal_code LIMIT 30) as c;
```

1.Query output

```xml
<?xml version="1.0" encoding="UTF-8"?>
<customer_data>
  <customer customer_id="382" age="36">
    <last_name>Castro</last_name>
    <first_name>Araceli</first_name>
    <gender>female</gender>
    <age>36</age>
    <title>ms</title>
    <order_details>
      <email>araceli-81@example.com</email>
      <order_address>
        <street>Uzfdaeuuzs Street</street>
        <house>45</house>
        <flat>74</flat>
        <gender>female</gender>
        <porch>0</porch>
        <detailed_order_data potal_code="1861">
          <country>Austria</country>
          <city>Tyrol</city>
          <continent>Europe</continent>
          <customer_fridges_on_current_address>
            <fridge fridge_id="83" year_of_production="2011-03-27">
              <fridge_type>Side-by-side</fridge_type>
              <fridge_color>silver</fridge_color>
              <prod_country>Indonesia</prod_country>
              <fridge_volume>44.3</fridge_volume>
            </fridge>
          </customer_fridges_on_current_address>
        </detailed_order_data>
      </order_address>
    </order_details>
  </customer>

  •••
```

```xml
  •••

  <customer customer_id="630" age="31">
    <last_name>Khan</last_name>
    <first_name>Niamh</first_name>
    <gender>female</gender>
    <age>31</age>
    <title>ms</title>
    <order_details>
      <phone>(699) 364 5194</phone>
      <order_address>
        <street>Njqodxtgvs Street</street>
        <house>11</house>
        <flat>73</flat>
        <gender>female</gender>
        <porch>1</porch>
        <detailed_order_data potal_code="1967">
          <country>Austria</country>
          <city>Vienna</city>
          <continent>Europe</continent>
          <customer_fridges_on_current_address>
            <fridge fridge_id="820" year_of_production="2015-09-30">
              <fridge_type>Built-in</fridge_type>
              <fridge_color>silver</fridge_color>
              <prod_country>China</prod_country>
              <fridge_volume>82</fridge_volume>
            </fridge>
          </customer_fridges_on_current_address>
        </detailed_order_data>
      </order_address>
    </order_details>
  </customer>
</customer_data>
```

1. **Query as a table (first 20 rows)**

fridge_id	customer_id	last_name	first_name	gender	age	title	email	phone	street	hause	flat	porch	postal_code	country	city	continent	type	year_of_prod	color	prod_country	volume
5	876	אלתרמן	גלעד	male	24	mr	גלעד_93@example.com	(826) 103 7907	Fbcvodiowl Street	37	50	1	1249	Austria	Lower Austria EAST	Europe	Built-in	27.07.16	red	Russia	51.5
6	418	Aladár	DarΓiczi	male	34	mr	darΓiczi83@example.com	(219) 319 9432	Rymbzcmnmw Street	28	48	0	1490	Austria	Burgenland	Europe	Top freezer	11.05.15	brown	Vietnam	95.4
11	184	Teleanu	Darius	male	36	mr	darius81@example.com	(461) 348 5101	Cprnmutlkz Street	48	38	1	1050	Austria	Carinthia	Europe	Bottom freezer	29.10.16	black	Vietnam	41.4
14	775	Βασιλειάδης	Ερμογένης	male	24	mr	voichiṭa-89@example.com	(174) 479 5800	Mxqfjhxypv Street	47	78	1	1145	Austria	Lower Austria WEST	Europe	Side-by-side	09.07.12	pink	Russia	44.5
15	490	Aman	VoichiИэа	female	28	ms	voichiИэa-89@example.com	(649) 821 2476	Hnfrossrhi Street	14	27	0	1990	Austria	Upper Austria	Europe	Compact	13.09.17	brown	Russia	53.8
17	260	Price	Nathan	male	21	mr	nathan_price@example.com	(543) 968 1944	Jpczeeqdmv Street	42	42	1	1109	Austria	Styria	Europe	Compact	02.05.15	brown	China	41.4
17	515	婉	婉	female	27	mrs	婉@example.com	(960) 609 3820	Omfzozvvca Street	4	99	1	1688	Austria	Vienna	Europe	Compact	02.05.15	brown	China	41.4
18	9	Orleanu	Marin	male	30	mr	marin87@example.com	(301) 270 5922	Sexdptxwzm Street	32	30	1	1748	Austria	Carinthia	Europe	Bottom freezer	26.03.12	red	Vietnam	45
18	500	Palmer	Luca	male	33	mr	luca_palmer@example.com	(271) 144 9320	Zegjhunfrk Street	42	47	1	1979	Austria	Lower Austria WEST	Europe	Bottom freezer	26.03.12	red	Vietnam	45
20	999	Davidovici	Bogdan	male	29	mr	bogdan-88@example.com	(852) 670 2048	Lkddnzfsue Street	27	62	0	1835	Austria	Lower Austria EAST	Europe	Side-by-side	16.11.10	pink	Vietnam	41.4
21	216	Straka	AugustΓn	male	26	mr	augustΓn-91@example.com	(773) 826 3298	Lqdrmndgsd Street	13	34	0	1510	Austria	Lower Austria WEST	Europe	Built-in	11.12.12	white	Japan	94.2
21	230	Murgeanu	Paraschiva	female	25	ms	paraschiva_92@example.com	(917) 580 7920	Fovfzmvcud Street	36	76	1	1554	Austria	Vienna	Europe	Built-in	11.12.12	white	Japan	94.2
22	365	Μπουκουβαλαίοι	Μπουκουβαλαίοι	male	35	mr	Μπουκουβαλαίοι@example.com	(501) 230 2201	Wgafkcnuzp Street	38	42	1	1769	Austria	Burgenland	Europe	Built-in	04.11.17	white	Russia	88.1
23	264	Frăţilă	Frăţilă	male	24	mr	Frăţilă@example.com	(246) 101 2274	Dsvmueemqw Street	14	33	0	1587	Austria	Tyrol	Europe	Compact	02.03.16	black	Germany	41.4
23	574	Иꙃerbu	Teodora	female	29	mrs	teodora-88@example.com	(787) 170 1371	Rmeewbkuxw Street	9	15	0	1240	Austria	Lower Austria WEST	Europe	Compact	02.03.16	black	Germany	41.4
23	664	Giurescu	Valeria	female	27	ms	valeria-90@example.com	(172) 269 8371	Ptxnejywft Street	40	26	0	1193	Austria	Salzburg	Europe	Compact	02.03.16	black	Germany	41.4
24	310	Sokolov	Mirtel	female	26	ms	mirtel91@example.com	(837) 637 1786	Idijqhtdhh Street	35	77	1	1715	Austria	Salzburg	Europe	Side-by-side	03.07.16	brown	Germany	41.4
26	836	Deac	SinicДѓ	male	23	mr	sinicДѓ-deac@example.com	(780) 337 9308	Zjkbaeqvhx Street	4	26	1	1964	Austria	Carinthia	Europe	Top freezer	21.10.13	white	Germany	41.4
26	858	Ungur	Francisc	male	30	mr	francisc_87@example.com	(577) 131 2878	Mwdssuugon Street	9	42	1	1207	Austria	Lower Austria WEST	Europe	Top freezer	21.10.13	white	Germany	41.4
28	129	Štefánik	Vratko	male	24	mr	vratko93@example.com	(509) 688 5519	Fvwnpdnqnv Street	20	46	0	1440	Austria	Vienna	Europe	Top freezer	06.08.12	white	China	41.4

2.Query: Fetch all local facilities data (NEW)

```sql
SELECT xmlroot(xmlelement(name "local_facility_data",
    xmlagg(
      xmlelement(name "local_facility", xmlattributes(lf.facility_id as facility_id, lf.facility_status as facility_status),
                  xmlforest(
                      lf.local_facility_name as local_facility_name,
                      lf.facility_type as facility_type
                      ),
              xmlelement(name "provide_service",
                  xmlelement(name "provide_service_in",
                          (SELECT xmlagg(
                              xmlelement(name "postal_code", xmlattributes(pc.postal_code as potal_code),
                                  xmlforest(
                                      pc.country as country,
                                      pc.city as city,
                                      pc.continent as continent
                                      )
                                      )
                                      )
                          FROM postal_code pc where lf.postal_code = pc.postal_code
                          ),
                  xmlelement(name "provide_service_for",
                          (SELECT xmlagg(
                          xmlelement(name "customer_data", xmlattributes(c.customer_id as customer_id, c.age as age),
                                      xmlforest(
                                          c.last_name as last_name,
                                          c.first_name as first_name,
                                          c.gender as gender,
                                          c.title as title
                                      ),
                                      xmlelement(name "customer_address", xmlattributes(ca.street as street),
                                          (case when lf.facility_type = 'Private' then
                                              xmlforest(
                                                  ca.street as street,
                                                  ca.hause as house,
                                                  ca.flat as flat
                                                  )
                                              else  xmlforest(
                                                  ca.street as street,
                                                  ca.hause as house,
                                                  ca.porch as porch
                                                  )
                                          end)
                                      )
                                  )
                          FROM customer c
                           JOIN customer_address ca ON c.customer_id = ca.customer_id
                           where c.customer_id = lf.customer_id
                           )
                      )
                  )
              )
          )
                  ),
          version '1.0', standalone yes)
FROM (select distinct lf.facility_id, lf.local_facility_name, lf.facility_type, lf.facility_status, lf.postal_code, lf.customer_id

      from local_facility as lf LIMIT 30) as lf;
```

2.Query output

```xml
<?xml version="1.0" encoding="UTF-8"?>
<local_facility_data>
  <local_facility facility_id="42" facility_status="ACTIVE">
    <local_facility_name>Local Facility 42 GMBH</local_facility_name>
    <facility_type>Mixed</facility_type>
    <provide_service>
      <provide_service_in>
        <postal_code potal_code="1386">
          <country>Austria</country>
          <city>Carinthia</city>
          <continent>Europe</continent>
        </postal_code>
        <provide_service_for>
          <customer_data customer_id="120" age="26">
            <last_name>Bratu </last_name>
            <first_name>Florian</first_name>
            <gender>female</gender>
            <title>ms</title>
            <customer_address street="Ndbfmcgbcf Street">
              <street>Ndbfmcgbcf Street</street>
              <house>18</house>
              <porch>0</porch>
            </customer_address>
          </customer_data>
        </provide_service_for>
      </provide_service_in>
    </provide_service>
  </local_facility>

  ...

      <local_facility facility_id="366" facility_status="INACTIVE">
      <local_facility_name>Local Facility 366 GMBH</local_facility_name>
      <facility_type>Private</facility_type>
      <provide_service>
        <provide_service_in>
          <postal_code potal_code="1002">
            <country>Austria</country>
            <city>Vienna</city>
            <continent>Europe</continent>
          </postal_code>
          <provide_service_for>
            <customer_data customer_id="972" age="34">
              <last_name>Baconschi</last_name>
              <first_name>Gianina</first_name>
              <gender>female</gender>
              <title>ms</title>
              <customer_address street="Rmuejfcanx Street">
                <street>Rmuejfcanx Street</street>
                <house>20</house>
                <flat>45</flat>
              </customer_address>
            </customer_data>
          </provide_service_for>
        </provide_service_in>
      </provide_service>
    </local_facility>
</local_facility_data>
```

2. Query as a table (first 20 rows)

facility_id	local_facility_name	facility_type	facility_status	postal_code	customer_id	last_name	first_name	gender	age	title	street	hause	flat	porch	country	city	continent
721	Local Facility 721 GMBH	Private	INACTIVE	1455	309	Akhigbe	Aganga	male	23	mr	Uloorsynpl Street	6	1	1	Austria	Lower Austria EAST	Europe
873	Local Facility 873 GMBH	Private	ACTIVE	1069	995	Humbert	Adrien	male	33	mr	Lczvryfjlm Street	50	23	0	Austria	Vienna	Europe
965	Local Facility 965 GMBH	Mixed	INACTIVE	1563	476	OʻOSOrПГОµO¬OrO·П,	OʺОµПѓПЪОïО№OSO±	female	24	ms	Ywqisyldtk Street	39	83	1	Austria	Vienna	Europe
649	Local Facility 649 GMBH	Corporate	ACTIVE	1827	822	VДѓduva	Beniamin	male	29	mr	Yyqhypvbdf Street	32	11	1	Austria	Vienna	Europe
222	Local Facility 222 GMBH	Private	INACTIVE	1269	182	O¬O±OђOjO·П,	OљO»OµOïП„П‰Пѓ	male	26	mr	Lxcgzqfyny Street	45	13	0	Austria	Burgenland	Europe
569	Local Facility 569 GMBH	Mixed	INACTIVE	1819	42	KollГЎr	AmГЎlia	female	22	ms	Efjuzfsiot Street	23	4	0	Austria	Tyrol	Europe
637	Local Facility 637 GMBH	Corporate	ACTIVE	1259	999	Davidovici	Bogdan	male	29	mr	Lkddnzfsue Street	27	62	0	Austria	Lower Austria EAST	Europe
221	Local Facility 221 GMBH	Private	ACTIVE	1985	508	RГ®pДѓ	AuricДѓ	male	28	mr	Arojwwodey Street	10	51	1	Austria	Upper Austria	Europe
241	Local Facility 241 GMBH	Mixed	INACTIVE	1152	55	SchrГ¶der	Max	male	33	mr	Geqqwmbihe Street	40	50	1	Austria	Vienna	Europe
363	Local Facility 363 GMBH	Corporate	INACTIVE	1223	165	MiklГіs	Gallai	male	22	mr	Wtbsplcojz Street	20	99	1	Austria	Lower Austria EAST	Europe
177	Local Facility 177 GMBH	Corporate	INACTIVE	1127	382	Castro	Araceli	female	36	ms	Uzfdaeuuzs Street	45	74	0	Austria	Vienna	Europe
777	Local Facility 777 GMBH	Mixed	ACTIVE	1349	591	Valdez	Christian	male	33	mr	Ykwumyiaki Street	35	34	0	Austria	Lower Austria WEST	Europe
63	Local Facility 63 GMBH	Private	INACTIVE	1564	699	Pineda	Benito	male	33	mr	Ejyithygkr Street	26	89	1	Austria	Salzburg	Europe
972	Local Facility 972 GMBH	Private	ACTIVE	1035	744	Otto	Milena	female	25	ms	Afbiwctmbm Street	21	61	0	Austria	Upper Austria	Europe
697	Local Facility 697 GMBH	Mixed	INACTIVE	1830	646	Jean	Loane	female	30	ms	Zhloggcabz Street	13	43	1	Austria	Styria	Europe
220	Local Facility 220 GMBH	Mixed	INACTIVE	1736	301	Sadoveanu	Beniamin	male	23	mr	Emikczcvjo Street	18	10	0	Austria	Styria	Europe
513	Local Facility 513 GMBH	Corporate	ACTIVE	1477	169	OљOO»O№OïO№	OљПЉПГОïО№OIOïП,	male	25	mr	Dlwpevyqwz Street	18	70	0	Austria	Lower Austria WEST	Europe
610	Local Facility 610 GMBH	Corporate	ACTIVE	1214	386	Mocioni	Aura	female	22	ms	Xccgprkbmr Street	23	57	1	Austria	Lower Austria WEST	Europe
696	Local Facility 696 GMBH	Corporate	INACTIVE	1794	237	OʻOПГOiO±П,	O•П…OєO»OµOïOrO·П,	male	26	mr	Pwjszqgxow Street	44	71	1	Austria	Upper Austria	Europe
885	Local Facility 885 GMBH	Mixed	INACTIVE	1924	296	Valdez	Christian	male	33	mr	Ufkjifojso Street	18	77	0	Austria	Tyrol	Europe

3.Query: Fetch all appointment data (NEW)

```
SELECT xmlroot(xmlelement(name "appointment_data",
  xmlagg(
    xmlelement(name "appointment", xmlattributes(ap.appointment_id as appointment_id),
                  xmlforest(
                        ap.appointment_type as appointment_type,
                        ap.special_handling as special_handling
                      ),
                  xmlelement(name "appointment_details",
                          xmlelement(name "customer_info",
                                  (SELECT xmlagg(
                                      xmlelement(name "customer_details", xmlattributes(c.customer_id as customer_id, c.age as age),
                                        xmlforest(
                                              c.customer_to_export as customer_to_export
                                          )
                                      )
                                  )
                                   FROM customer c where ap.customer_id = c.customer_id
                                  )
                              ),
                          xmlelement(name "appointment_date", xmlattributes(ap.appointment_id as appointment_id),
                                  xmlforest(
                                      ap.real_date as real_date,
                                      ap.esimated_date as estimated_date
                                      )
                              ),
                          xmlelement(name "status",
                                  xmlelement(name "symptom", xmlattributes(ap.symptom_type as symptom_type),
                                      (case when ap.assumption = 'UNKNOWN'
                                        then
                                      xmlforest(
                                            ap.symptom_description as symptom_description,
                                            ap.caused_by as caused_by,
                                            ap.symptom_from as symptom_from
                                          ) else
                                      xmlforest(
                                            ap.symptom_description as symptom_description,
                                            ap.assumption as assumption,
                                            ap.symptom_from as symptom_from
                                          )
                                      end),
                                      xmlelement(name "status", xmlattributes(ap.status as status, ap.status_type as status_type),
                                              xmlforest(
                                                  ap.repared as repared,
                                                  ap.spendet_time as spendet_time,
                                                  ap.esitmated_time as estimated_time
                                                  )
                                          )
                                  )
                              )
                      )
                  )
          ),
                  version '1.0', standalone yes)
FROM (select distinct ap.appointment_id, ap.appointment_type, ap.special_handling, ap.real_date, ap.esimated_date, ap.customer_id,
            s.symptom_type, s.symptom_description,  s.caused_by, s.assumption, s.symptom_from,
            rep.status, rep.status_type, rep.repared, rep.spendet_time, rep.esitmated_time
      from appointment ap
  JOIN repair_status rep ON ap.appointment_id = rep.appointment_id
    JOIN symptom s ON ap.appointment_id = s.appointment_id LIMIT 30) as ap;
```

3.Query output

```xml
<?xml version="1.0" encoding="UTF-8"?>
<appointment_data>
  <appointment appointment_id="644">
    <appointment_type>CORPORATE</appointment_type>
    <special_handling>As quick as possible</special_handling>
    <appointment_details>
      <customer_info>
        <customer_details customer_id="466" age="34">
          <customer_to_export>
            <customer_data>
              <customer>
                <customer_id>466</customer_id>
                <fridge_id>778</fridge_id>
                <first_name>Paridhi</first_name>
                <last_name>Malhotra</last_name>
                <gender>female</gender>
                <age>34</age>
                <title>ms</title>
                <phone>(360) 210 7424</phone>
                <email>paridhi-83@example.com</email>
                <customer_address>
                  <street>Nyyldxodlg Street</street>
                  <hause>47</hause>
                  <flat>95</flat>
                  <porch>0</porch>
                  <postal_code>
                    <postal_code>1816</postal_code>
                    <country>Austria</country>
                    <city>Tyrol</city>
                    <continent>Europe</continent>
                    <type>commercial</type>
                  </postal_code>
                </customer_address>
              </customer>
            </customer_data>
          </customer_to_export>
        </customer_details>
      </customer_info>
      <appointment_date appointment_id="644">
        <real_date>2015-07-10</real_date>
        <estimated_date>2017-04-19</estimated_date>
      </appointment_date>
      <status>
        <symptom symptom_type="COOL_FREEZEIN ">
          <symptom_description>Doesnt give me a cool vibes</symptom_description>
          <caused_by>Cat</caused_by>
          <assumption>UNKNOWN</assumption>
          <symptom_from>2011-09-28</symptom_from>
          <status status="NEED TO TAKE FRIDGE " status_type="WARNING ">
            <repared>NEED TO TAKE FRIDGE</repared>
            <spendet_time>03:42:27</spendet_time>
            <estimated_time>04:14:09</estimated_time>
          </status>
        </symptom>
      </status>
    </appointment_details>
  </appointment>

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  <appointment appointment_id="687">
    <appointment_type>PRIVATE</appointment_type>
    <special_handling>As quick as possible</special_handling>
    <appointment_details>
      <customer_info>
        <customer_details customer_id="112" age="33">
          <customer_to_export>
            <customer_data>
              <customer>
                <customer_id>112</customer_id>
                <fridge_id>961</fridge_id>
                <first_name>Samuel</first_name>
                <last_name>Anderson</last_name>
                <gender>male</gender>
                <age>33</age>
                <title>mr</title>
                <phone>(186) 226 1361</phone>
                <email>samuel-84@example.com</email>
                <customer_address>
                  <street>Mhdlioexbr Street</street>
                  <hause>44</hause>
                  <flat>29</flat>
                  <porch>0</porch>
                  <postal_code>
                    <postal_code>1983</postal_code>
                    <country>Austria</country>
                    <city>Burgenland</city>
                    <continent>Europe</continent>
                    <type>private</type>
                  </postal_code>
                </customer_address>
              </customer>
            </customer_data>
          </customer_to_export>
        </customer_details>
      </customer_info>
      <appointment_date appointment_id="687">
        <real_date>2014-09-26</real_date>
        <estimated_date>2012-06-14</estimated_date>
      </appointment_date>
      <status>
        <symptom symptom_type="ELECTRONICAL">
          <symptom_description>Dosnt turn on</symptom_description>
          <caused_by>Baby</caused_by>
          <symptom_from>2011-03-25</symptom_from>
          <status status="NEED HELP" status_type="WARNING">
            <repared>NEED HELP</repared>
            <spendet_time>00:16:04</spendet_time>
            <estimated_time>04:10:29</estimated_time>
          </status>
        </symptom>
      </status>
    </appointment_details>
  </appointment>
</appointment_data>
```

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3. Query as a table (first 20 rows)

appointment_id	appointment_type	special_handling	real_date	esimated_date	customer_id	symptom_type	symptom_description	caused_by	assumption	symptom_from	status	status_type	repared	spendet_time	esitmated_time	customer_to_export
1	CORPORATE	Quality Inspection	26.04.11	01.12.10	610	OUTESIDE DAMAGE	Doesnt give me a cool vibes	Wife	Dance on Fridge	19.07.16	NEED TOOLS	CRITICAL	NEED TOOLS	8:57:25	9:23:10	<customer_data><customer>... <customer></customer_data>
2	CORPORATE	Quality Inspection	23.05.15	15.10.10	147	OUTESIDE DAMAGE	Dosnt turn on	Baby	Too high woltage	23.12.11	NEED TO TAKE FRIDGE	DEFAULT	NEED TO TAKE FRIDGE	8:23:22	5:48:53	<customer_data><customer>... <customer></customer_data>
3	CORPORATE	As quick as possible	24.05.14	25.05.13	768	COOL_FREEZEIN	Dosnt turn on	Cat	UNKNOWN	18.11.13	NEED HELP	CRITICAL	NEED HELP	5:19:28	4:56:59	<customer_data><customer>... <customer></customer_data>
4	CORPORATE	Quality Inspection	20.03.11	06.05.11	935	ELECTRONICAL	Doesnt give me a cool vibes	Dog	Too high woltage	02.07.16	NEED HELP	WARNING	NEED HELP	8:27:09	0:44:13	<customer_data><customer>... <customer></customer_data>
5	CORPORATE	As quick as possible	15.11.11	26.01.13	853	ELECTRONICAL	FRIDGE IS ON FIREEEE	Wife	UNKNOWN	17.12.16	NEED HELP	DEFAULT	NEED HELP	12:30:13	8:39:25	<customer_data><customer>... <customer></customer_data>
6	CORPORATE	DEFAULT	16.05.14	29.06.15	667	ELECTRONICAL	Doesnt really work	Baby	Drop fridge	01.04.12	NEED HELP	DEFAULT	NEED HELP	12:53:43	7:34:14	<customer_data><customer>... <customer></customer_data>
7	CORPORATE	Quality Inspection	27.03.11	24.08.13	592	ICE	FRIDGE IS ON FIREEEE	Wife	Too many beer there	05.12.11	NEED TO TAKE FRIDGE	CRITICAL	NEED TO TAKE FRIDGE	9:26:27	6:49:59	<customer_data><customer>... <customer></customer_data>
8	CORPORATE	As quick as possible	01.06.11	05.05.12	580	OUTESIDE DAMAGE	Doesnt really work	Cat	Too high woltage	04.11.13	NEED TO TAKE FRIDGE	DEFAULT	NEED TO TAKE FRIDGE	0:05:11	0:53:33	<customer_data><customer>... <customer></customer_data>
9	CORPORATE	Quality Inspection	19.03.11	25.04.14	752	ICE	Dosnt turn on	Baby	Too high woltage	11.06.11	NEED TO TAKE FRIDGE	WARNING	NEED TO TAKE FRIDGE	1:15:29	8:26:30	<customer_data><customer>... <customer></customer_data>
10	PRIVATE	Quality Inspection	22.12.16	29.09.11	901	ELECTRONICAL	UNKNOWN	Dog	UNKNOWN	22.03.13	NEED HELP	DEFAULT	NEED HELP	12:31:23	0:57:19	<customer_data><customer>... <customer></customer_data>
11	CORPORATE	As quick as possible	27.03.17	07.05.11	550	OUTESIDE DAMAGE	Doesnt give me a cool vibes	Cat	Too many beer there	11.09.12	ALL OK	WARNING	ALL OK	11:23:10	2:08:31	<customer_data><customer>... <customer></customer_data>
12	PRIVATE	Quality Inspection	22.10.14	13.11.17	166	FREEZING	Doesnt give me a cool vibes	UNKNOWN	Too many beer there	05.12.12	NEED TOOLS	CRITICAL	NEED TOOLS	5:59:29	3:19:52	<customer_data><customer>... <customer></customer_data>
13	CORPORATE	DEFAULT	04.06.17	06.06.17	593	OUTESIDE DAMAGE	UNKNOWN	Wife	Too many beer there	27.07.13	NEED TOOLS	WARNING	NEED TOOLS	8:09:20	12:40:04	<customer_data><customer>... <customer></customer_data>
14	CORPORATE	DEFAULT	09.01.14	11.10.16	144	OUTESIDE DAMAGE	FRIDGE IS ON FIREEEE	UNKNOWN	Dance on Fridge	29.05.12	NEED TOOLS	WARNING	NEED TOOLS	7:58:30	0:34:21	<customer_data><customer>... <customer></customer_data>
15	CORPORATE	As quick as possible	23.07.12	30.07.13	458	FREEZING	Doesnt give me a cool vibes	Wife	UNKNOWN	27.04.13	NEED TOOLS	CRITICAL	NEED TOOLS	4:49:18	11:51:19	<customer_data><customer>... <customer></customer_data>
16	PRIVATE	As quick as possible	22.05.14	06.09.13	874	FREEZING	UNKNOWN	Dog	Dance on Fridge	21.02.10	NEED TOOLS	DEFAULT	NEED TOOLS	10:25:29	12:07:37	<customer_data><customer>... <customer></customer_data>
17	PRIVATE	As quick as possible	26.04.13	17.04.16	947	ELECTRONICAL	Dosnt turn on	UNKNOWN	UNKNOWN	19.09.10	ALL OK	WARNING	ALL OK	12:46:14	8:24:01	<customer_data><customer>... <customer></customer_data>
18	CORPORATE	Quality Inspection	08.08.11	12.11.15	846	ELECTRONICAL	FRIDGE IS ON FIREEEE	UNKNOWN	Too high woltage	13.09.17	NEED HELP	WARNING	NEED HELP	5:10:20	1:12:13	<customer_data><customer>... <customer></customer_data>
19	PRIVATE	As quick as possible	21.03.17	23.06.14	692	FREEZING	Dosnt turn on	Baby	Too high woltage	21.01.13	ALL OK	DEFAULT	ALL OK	7:57:25	11:03:13	<customer_data><customer>... <customer></customer_data>
20	CORPORATE	Quality Inspection	29.12.17	08.03.10	893	FREEZING	Doesnt give me a cool vibes	Dog	Too high woltage	28.12.14	ALL OK	DEFAULT	ALL OK	10:04:45	9:28:47	<customer_data><customer>... <customer></customer_data>

4.Query: Fetch all rate data (using xml) (NEW)

```
SELECT xmlroot(xmlelement(name "rate_data",
    xmlagg(
        xmlelement(name "rate", xmlattributes(ap.appointment_id AS appointment_id),
                        xmlforest(
                        ap.appointment_type AS appointment_type,
                        ap.special_handling AS special_handling
                        ),
                xmlelement(name "rate_details",
                        (CASE WHEN ap.rate<3 THEN
                        xmlelement(name "status", xmlattributes(ap.status AS status, ap.rate AS rate, ap.rate_type AS rate_type),
                                xmlforest(
                                    ap.repared AS repared,
                                    ap.spendet_time AS spendet_time,
                                    ap.esitmated_time AS estimated_time
                                    )
                            )
                        ELSE
                        xmlelement(name "status", xmlattributes(ap.status_type AS status_type, ap.rate AS rate, ap.rate_type AS rate_type),
                                xmlforest(
                                    ap.repared AS repared,
                                    ap.spendet_time AS spendet_time,
                                    ap.esitmated_time AS estimated_time
                                    )
                            )
                        end),
                    xmlforest(
                        ap.rate_description AS rate_description,
                        ap.recommend AS recommend
                        ),
                xmlelement(name "customer_data",
                            (SELECT xmlagg(
                                    xmlforest(
                                        c.customer_to_export AS customer_to_export
                                            )
                                )
                            FROM customer c WHERE c.customer_id = ap.customer_id
                        )
                    )
                )
            ))),
        version '1.0', standalone yes)
FROM (SELECT DISTINCT ap.appointment_id, ap.appointment_type, ap.special_handling, ap.customer_id,
                rep.status, rep.status_type, rep.repared, rep.spendet_time, rep.esitmated_time,
                fr.rate, fr.rate_description, fr.rate_type, fr.recommend
        FROM appointment ap
    JOIN facility_rate fr ON ap.appointment_id = fr.appointment_id
        JOIN repair_status rep ON ap.appointment_id = rep.appointment_id
        LIMIT 30) AS ap;
```

4.Query output

```xml
<?xml version="1.0" encoding="UTF-8"?>
<rate_data>
  <rate appointment_id="689">
    <appointment_type>PRIVATE</appointment_type>
    <special_handling>Quality Inspection</special_handling>
    <rate_details>
      <status status="NEED HELP " rate="5" rate_type="POSITIVE">
        <repared>NEED HELP</repared>
        <spendet_time>02:43:07</spendet_time>
        <estimated_time>11:50:29</estimated_time>
      </status>
      <rate_description>Funny Guy</rate_description>
      <recommend>YES</recommend>
      <customer_data>
        <customer_to_export>
          <customer_data>
            <customer>
              <customer_id>189</customer_id>
              <fridge_id>64</fridge_id>
              <first_name>Robert</first_name>
              <last_name>Alvarez</last_name>
              <gender>male</gender>
              <age>22</age>
              <title>mr</title>
              <phone>(964) 265 1784</phone>
              <email>robert-95@example.com</email>
              <customer_address>
                <street>KlzzltInru Street</street>
                <hause>11</hause>
                <flat>16</flat>
                <porch>1</porch>
                <postal_code>
                  <postal_code>1677</postal_code>
                  <country>Austria</country>
                  <city>Styria</city>
                  <continent>Europe</continent>
                  <type>commercial</type>
                </postal_code>
              </customer_address>
            </customer>
          </customer_data>
        </customer_to_export>
      </customer_data>
    </rate_details>
  </rate>

...

  <rate appointment_id="92">
    <appointment_type>PRIVATE</appointment_type>
    <special_handling>DEFAULT</special_handling>
    <rate_details>
      <status status="NEED TO TAKE FRIDGE " rate="4" rate_type="POSITIVE">
        <repared>NEED TO TAKE FRIDGE</repared>
        <spendet_time>02:38:28</spendet_time>
        <estimated_time>00:09:53</estimated_time>
      </status>
      <rate_description>OMG SO BAD FUUUU</rate_description>
      <recommend>MORE NO</recommend>
      <customer_data>
        <customer_to_export>
          <customer_data>
            <customer>
              <customer_id>779</customer_id>
              <fridge_id>810</fridge_id>
              <first_name>Nathan</first_name>
              <last_name>Price</last_name>
              <gender>male</gender>
              <age>21</age>
              <title>mr</title>
              <phone>(543) 968 1944</phone>
              <email>nathan_price@example.com</email>
              <customer_address>
                <street>Hyvtycsvaw Street</street>
                <hause>11</hause>
                <flat>7</flat>
                <porch>1</porch>
                <postal_code>
                  <postal_code>1689</postal_code>
                  <country>Austria</country>
                  <city>Lower Austria EAST</city>
                  <continent>Europe</continent>
                  <type>private</type>
                </postal_code>
              </customer_address>
            </customer>
          </customer_data>
        </customer_to_export>
      </customer_data>
    </rate_details>
  </rate>
</rate_data>
```

4. Query as a table (first 20 rows)

appointment_id	appointment_type	special_handling	customer_id	status	statys_type	repared	spendet_time	estimated_time	rate	rate_descrtiption	rate_type	customer_to_export	recommend
1	CORPORATE	Quality Inspection	610	NEED TOOLS	CRITICAL	NEED TOOLS	8:57:25	9:23:10	1.0	NOT GOOD	NEGATIVE	<customer_data><customer>...<customer></customer_data>	NOT SURE
2	CORPORATE	Quality Inspection	147	NEED TO TAKE FRIDGE	DEFAULT	NEED TO TAKE FRIDGE	8:23:22	5:48:53	3.0	Was cool	POSITIVE	<customer_data><customer>...<customer></customer_data>	NOT SURE
3	CORPORATE	As quick as possible	768	NEED HELP	CRITICAL	NEED HELP	5:19:28	4:56:59	5.0	GOOD	NEGATIVE	<customer_data><customer>...<customer></customer_data>	NO
4	CORPORATE	Quality Inspection	935	NEED HELP	WARNING	NEED HELP	8:27:09	0:44:13	3.0	Pretty Quick	NEGATIVE	<customer_data><customer>...<customer></customer_data>	NOT SURE
5	CORPORATE	As quick as possible	853	NEED HELP	DEFAULT	NEED HELP	12:30:13	8:39:25	3.0	NOT GOOD	NEGATIVE	<customer_data><customer>...<customer></customer_data>	MORE NO
6	CORPORATE	DEFAULT	667	NEED HELP	DEFAULT	NEED HELP	12:53:43	7:34:14	4.0	OMG SO BAD FUUUU	POSITIVE	<customer_data><customer>...<customer></customer_data>	MORE NO
7	CORPORATE	Quality Inspection	592	NEED TO TAKE FRIDGE	CRITICAL	NEED TO TAKE FRIDGE	9:26:27	6:49:59	5.0	Pretty Quick	POSITIVE	<customer_data><customer>...<customer></customer_data>	NO
8	CORPORATE	As quick as possible	580	NEED TO TAKE FRIDGE	DEFAULT	NEED TO TAKE FRIDGE	0:05:11	0:53:33	3.0	Liked it	POSITIVE	<customer_data><customer>...<customer></customer_data>	MORE NO
9	CORPORATE	Quality Inspection	752	NEED TO TAKE FRIDGE	WARNING	NEED TO TAKE FRIDGE	1:15:29	8:26:30	2.0	Liked it	POSITIVE	<customer_data><customer>...<customer></customer_data>	MORE NO
10	PRIVATE	Quality Inspection	901	NEED HELP	DEFAULT	NEED HELP	12:31:23	0:57:19	5.0	Was cool	POSITIVE	<customer_data><customer>...<customer></customer_data>	NO
11	CORPORATE	As quick as possible	550	ALL OK	WARNING	ALL OK	11:23:10	2:08:31	1.0	Was cool	NEGATIVE	<customer_data><customer>...<customer></customer_data>	MORE YES
12	PRIVATE	Quality Inspection	166	NEED TOOLS	CRITICAL	NEED TOOLS	5:59:29	3:19:52	4.0	GOOD	POSITIVE	<customer_data><customer>...<customer></customer_data>	MORE NO
13	CORPORATE	DEFAULT	593	NEED TOOLS	WARNING	NEED TOOLS	8:09:20	12:40:04	1.0	GOOD	POSITIVE	<customer_data><customer>...<customer></customer_data>	NO
14	CORPORATE	DEFAULT	144	NEED TOOLS	WARNING	NEED TOOLS	7:58:30	0:34:21	1.0	GOOD	NEGATIVE	<customer_data><customer>...<customer></customer_data>	NO
15	CORPORATE	As quick as possible	458	NEED TOOLS	CRITICAL	NEED TOOLS	4:49:18	11:51:19	3.0	Liked it	POSITIVE	<customer_data><customer>...<customer></customer_data>	MORE YES
16	PRIVATE	As quick as possible	874	NEED TOOLS	DEFAULT	NEED TOOLS	10:25:29	12:07:37	5.0	Pretty Quick	NEGATIVE	<customer_data><customer>...<customer></customer_data>	NO
17	PRIVATE	As quick as possible	947	ALL OK	WARNING	ALL OK	12:46:14	8:24:01	1.0	GOOD	POSITIVE	<customer_data><customer>...<customer></customer_data>	YES
18	CORPORATE	Quality Inspection	846	NEED HELP	WARNING	NEED HELP	5:10:20	1:12:13	1.0	GOOD	POSITIVE	<customer_data><customer>...<customer></customer_data>	NOT SURE

5.Query: Fetch all rate and facilities data (using xml) (NEW)

```
SELECT xmlroot(xmlelement(name "rates_and_facilities",
        xmlagg(
    xmlelement(name "rates_of_particular_facility",
                xmlelement(name "facility_data", xmlattributes(lf.facility_id as facility_id, lf.facility_type as facility_type),
                                (case when lf.facility_status = 'ACTIVE' then
                                        xmlforest(
                                        lf.local_facility_name as local_facility_name,
                                        lf.facility_type as facility_type
                                        )
                                    else xmlforest(
                                                lf.local_facility_name as local_facility_name,
                                                lf.facility_status as facility_status
                                                )
                                end),
                            xmlelement(name "detailed_data",
                                    (SELECT
                                            xmlagg(
                                        xmlelement(name "appointment", xmlattributes(ap.appointment_id as appointment_id),
                                                xmlforest(
                                                    ap.appointment_data_to_export as appointment_data_to_export
                                                    )
                                                    )
                                        )
                                FROM appointment ap where ap.facility_id = lf.facility_id
                                ),
                                xmlelement(name "facility_rate",
                                        (SELECT
                                                xmlagg(
                                        xmlelement(name "appointment", xmlattributes(fr.rate as rate, fr.rate_type as rate_type),
                                                xmlforest(
                                                            fr.rate_description as rate_description,
                                                            fr.recommend as recommend
                                                            )
                                                    )
                                                )
                                        FROM facility_rate fr JOIN repair_status rep ON lf.appointment_id = rep.appointment_id
                                        where lf.appointment_id = fr.appointment_id
                                        )
                                    )
                                )
                            )
                )
            )
                        ),
        version '1.0', standalone yes)
FROM (SELECT DISTINCT lf.facility_id,  lf.local_facility_name, lf.facility_type, lf.facility_status,
        a.appointment_id
        from local_facility lf JOIN appointment a ON a.facility_id = lf.facility_id
    LIMIT 30) as lf;
```

5.Query output (because of xml it's pretty big)

```xml
<?xml version="1.0" encoding="UTF-8"?>
<rates_and_facilities>
  <rates_of_particular_facility>
    <facility_data facility_id="610" facility_type="Corporate">
      <local_facility_name>Local Facility 610 GMBH</local_facility_name>
      <facility_type>Corporative</facility_type>
      <detailed_data>
        <appointment appointment_id="787">
          <appointment_data_to_export>
            <appointment_data>
              <appointment>
                <appointment_id>787</appointment_id>
                <appointment_type>CORPORATE</appointment_type>
                <special_handling>DEFAULT</special_handling>
                <esimated_date>2010-09-13</esimated_date>
                <real_date>2014-07-18</real_date>
                <customer_id>302</customer_id>
                <facility>
                  <facility_id>105</facility_id>
                  <local_facility_name>Local Facility 105 GMBH</local_facility_name>
                  <facility_type>Mixed</facility_type>
                  <facility_status>INACTIVE</facility_status>
                  <repair>
                    <status>NEED HELP</status>
                    <status_type>WARNING</status_type>
                    <repared>NEED HELP</repared>
                    <spendet_time>01:30:28</spendet_time>
                    <esitmated_time>12:42:36</esitmated_time>
                    <symptom>
                      <symptom_type>FREEZING</symptom_type>
                      <symptom_description>Doesnt give me a cool vibes</symptom_description>
                      <caused_by>Cat</caused_by>
                      <assumption>Too many beer there</assumption>
                      <symptom_from>2017-07-26</symptom_from>
                    </symptom>
                  </repair>
                </facility>
              </appointment>
            </appointment_data>
          </appointment_data_to_export>
        </appointment>
        <appointment>
          <appointment_data_to_export>
            <appointment_data>
              <appointment>
                <appointment_id>787</appointment_id>
                <appointment_type>CORPORATE</appointment_type>
                <special_handling>Quality Inspection</special_handling>
                <esimated_date>2013-12-21</esimated_date>
                <real_date>2015-10-15</real_date>
                <customer_id>184</customer_id>

                <facility>
                  <facility_id>333</facility_id>
                  <local_facility_name>Local Facility 333 GMBH</local_facility_name>
                  <facility_type>Mixed</facility_type>
                  <facility_status>INACTIVE</facility_status>
                  <repair>
                    <status>ALL OK</status>
                    <status_type>DEFAULT</status_type>
                    <repared>ALL OK</repared>
                    <spendet_time>11:47:39</spendet_time>
                    <esitmated_time>03:53:12</esitmated_time>
                    <symptom>
                      <symptom_type>FREEZING</symptom_type>
                      <symptom_description>Dosnt turn on</symptom_description>
                      <caused_by>UNKNOWN</caused_by>
                      <assumption>UNKNOWN</assumption>
                      <symptom_from>2010-09-29</symptom_from>
                    </symptom>
                  </repair>
                </facility>
              </appointment>
            </appointment_data>
          </appointment_data_to_export>
        </appointment>
        <facility_rate>
          <appointment rate="1" rate_type="POSITIVE">
            <rate_description>Was cool</rate_description>
            <recommend>MORE NO</recommend>
          </appointment>
        </facility_rate>
      </detailed_data>
    </facility_data>
  </rates_of_particular_facility>


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  <facility_data>


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      </facility_rate>
    </detailed_data>
  </facility_data>
  </rates_of_particular_facility>
</rates_and_facilities>
```

5. **Query as a table (first 20 rows)**

facility_id	local_facility_name	facility_type	facility_status	appointment_id	rate	rate_description	rate_type	recommend	appointment_data_to_export
380	Local Facility 380 GMBH	Mixed	INACTIVE	58	1	OMG SO BAD FUUUU	POSITIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
380	Local Facility 380 GMBH	Mixed	INACTIVE	642	1	OMG SO BAD FUUUU	POSITIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
380	Local Facility 380 GMBH	Mixed	INACTIVE	509	1	OMG SO BAD FUUUU	POSITIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
357	Local Facility 357 GMBH	Private	ACTIVE	23	1	Funny Guy	POSITIVE	MORE YES	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
293	Local Facility 293 GMBH	Mixed	ACTIVE	13	1	GOOD	POSITIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
655	Local Facility 655 GMBH	Private	INACTIVE	5	3	NOT GOOD	NEGATIVE	MORE NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
655	Local Facility 655 GMBH	Private	INACTIVE	474	3	NOT GOOD	NEGATIVE	MORE NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
124	Local Facility 124 GMBH	Private	ACTIVE	72	3	Pretty Quick	POSITIVE	NOT SURE	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
124	Local Facility 124 GMBH	Private	ACTIVE	311	3	Pretty Quick	POSITIVE	NOT SURE	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
124	Local Facility 124 GMBH	Private	ACTIVE	114	3	Pretty Quick	POSITIVE	NOT SURE	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
469	Local Facility 469 GMBH	Mixed	ACTIVE	170	4	Liked it	POSITIVE	MORE YES	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
469	Local Facility 469 GMBH	Mixed	ACTIVE	373	4	Liked it	POSITIVE	MORE YES	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
669	Local Facility 669 GMBH	Corporate	ACTIVE	109	4	NOT GOOD	NEGATIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
669	Local Facility 669 GMBH	Corporate	ACTIVE	652	4	NOT GOOD	NEGATIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
669	Local Facility 669 GMBH	Corporate	ACTIVE	750	4	NOT GOOD	NEGATIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
99	Local Facility 99 GMBH	Corporate	INACTIVE	140	1	Was cool	NEGATIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
388	Local Facility 388 GMBH	Mixed	INACTIVE	146	5	Funny Guy	POSITIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
388	Local Facility 388 GMBH	Mixed	INACTIVE	175	5	Funny Guy	POSITIVE	NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
867	Local Facility 867 GMBH	Mixed	INACTIVE	130	1	Liked it	POSITIVE	MORE NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>
867	Local Facility 867 GMBH	Mixed	INACTIVE	774	1	Liked it	POSITIVE	MORE NO	\<appointment_data>\<appointment> ...\</appointment>\</appointment_data>