

```
cs421=> SELECT cid
cs421-> FROM clients
cs421-> EXCEPT SELECT cid
cs421-> FROM subscriptions S
cs421-> WHERE S.enddate > '2018-01-01'
cs421-> LIMIT 50;
```

```
cid
-----
43
11
80
16
39
54
3
47
61
96
67
87
46
99
48
28
83
36
94
15
77
4
30
89
50
73
95
40
56
53
62
19
57
51
92
23
31
35
65
52
76
69
44
37
85
34
82
81
25
32
(50 rows)
```

```

cs421=> SELECT pid, I.cid, fname, lname
cs421-> FROM prescriptions P, individuals I
cs421-> WHERE P.cid = I.cid AND I.gender = 'Female'
cs421-> --GROUP BY gender
cs421-> ORDER BY pid
cs421-> LIMIT 50;

```

pid	cid	fname	lname
3	86	Henrieta	MacIan
9	76	Rhodie	Brownsworth
10	92	Elvina	Oliveras
11	89	Gunilla	Nesbeth
12	84	Chiarra	Theyer
19	99	Ernesta	Quest
20	93	Angelita	McGrale
23	85	Lona	Benning
24	97	Gennie	Cothey
27	94	Chrystel	Borley
51	91	Fionna	Warr
52	80	Cate	Di Carlo
55	87	Lanita	Gallatly
59	96	Christina	Beric
62	74	Ashia	Downie
66	79	Trenna	Philippson
67	71	Jamie	Aylesbury
68	90	Cassandra	Ferron
69	82	Jemmie	Lechmere
73	98	Erminie	Bradwell
76	83	Lexie	Cubley
80	95	Anjanette	Abramin
81	72	Desdemona	Bourgour
86	77	Helge	Naldrett
89	78	Eleanora	Pelfer
92	88	Terri	Gotfrey
96	81	Mathilde	Mirando
97	73	Orella	Knatt

(28 rows)

```
cs421=> SELECT I.gender,AVG(R.totalprice::NUMERIC)
cs421-> FROM receipts R, prescriptions P, individuals I
cs421-> WHERE R.pid = P.Pid AND P.cid = I.cid
cs421-> GROUP BY I.gender;
```

gender	avg
Male	378.020000000000000000
Female	197.915000000000000000

(2 rows)

```
cs421=> SELECT I.gender,AVG(P.price::NUMERIC)
cs421-> FROM subscriptions S, individuals I, insuranceplans P
cs421-> WHERE S.planid = P.planid AND I.cid = S.cid
cs421-> GROUP BY I.gender;
```

gender	avg
Other	213.000000000000000000
Male	909.000000000000000000
Female	638.000000000000000000

(3 rows)

```
/* Get adult individuals who have been reimbursed more than 20$ */
```

```
SELECT
```

```
    DISTINCT(I.birthdate),  
    I.cid,  
    SUM( Re.amount::NUMERIC )
```

```
FROM
```

```
    insuranceclaims IC,  
    receipts R,  
    individuals I,  
    reimbursed Re,  
    prescriptions P
```

```
WHERE
```

```
    IC.rid = R.rid  
    AND Re.icid = IC.icid  
    AND IC.rid = R.rid  
    AND R.pid = P.pid  
    AND P.cid = I.cid  
    AND I.cid IN(  
        SELECT  
            cid  
        FROM  
            individuals  
        WHERE  
            age(current_date, I.birthdate) >= '18 years'  
    )
```

```
GROUP BY
```

```
    I.cid
```

```
HAVING
```

```
    SUM( Re.amount::NUMERIC ) > 20
```

```
LIMIT 50;
```

```
birthdate | cid | sum
-----+-----+-----
1958-05-01 | 51 | 60.00
1970-04-19 | 66 | 100.00
1971-12-06 | 93 | 60.00
(3 rows)
```