

```
CREATE TABLE users(user_id serial PRIMARY KEY, username VARCHAR (30), email  
VARCHAR(30) );
```

```
INSERT INTO users ( user_id, username, email ) VALUES (1, 'Carlos', 'carlos@correocarlos.com' );  
INSERT INTO users ( user_id, username, email ) VALUES (1, 'Laura', 'laura@correolaura.com' );
```

```
call_list=# CREATE TABLE calls(call_id serial PRIMARY KEY, phone varchar(15), call_date date,  
user_id integer REFERENCES users(user_id));
```

```
UPDATE users SET last_name = 'Castro' WHERE username = 'Carlos';
```

```
UPDATE users SET last_name = 'Lopez' WHERE username = 'Laura';
```

```
call_list=# INSERT INTO calls(call_id, phone, call_date, user_id) VALUES (1, '5692222222', '12-  
12-1999', 1 );
```

```
ERROR: column "call_date" is of type date but expression is of type integer
```

```
LINE 1: ..., call_date, user_id) VALUES (1, '5692222222', 12-12-1999...
```

^

```
HINT: You will need to rewrite or cast the expression.
```

```
call_list=# INSERT INTO calls(call_id, phone, call_date, user_id) VALUES (1, '5692222222', '12-  
12-1999', 1 );
```

```
INSERT 0 1
```

```
call_list=# INSERT INTO calls(call_id, phone, call_date, user_id) VALUES (2, '5693333333', '12-  
11-1999', 1 );
```

```
INSERT 0 1
```

```
call_list=#
```

```
call_list=# INSERT INTO calls(call_id, phone, call_date, user_id) VALUES (3, '5692222222', '12-  
10-1999', 1 );
```

```
INSERT 0 1
```

```
call_list=# INSERT INTO calls(call_id, phone, call_date, user_id) VALUES (4, '5691111111', '12-  
9-1999', 1 );
```

```
INSERT 0 1
```

```
call_list=# INSERT INTO calls(call_id, phone, call_date, user_id) VALUES (1, '5691111111', '12-  
9-1999', 2 );
```

```
ERROR: duplicate key value violates unique constraint "calls_pkey"
```

```
DETAIL: Key (call_id)=(1) already exists.
```

```
call_list=# INSERT INTO calls(call_id, phone, call_date, user_id) VALUES (5, '5691111111', '12-  
9-1999', 2 );
```

```
INSERT 0 1
```

```
call_list=# INSERT INTO calls(call_id, phone, call_date, user_id) VALUES (6, '56912345678', '12-  
8-1999', 2 );
```

```
INSERT 0 1
```

```
call_list=# INSERT INTO calls(call_id, phone, call_date, user_id) VALUES (7, '56912345678', '11-  
8-1999', 2 );
```

```
INSERT 0 1
```

```

call list=# INSERT INTO calls(call id, phone, call date, user id) VALUES (8, '56912345678', '10-8-1999', 2 );
INSERT 0 1
call list=# INSERT INTO calls(call id, phone, call date, user id) VALUES (9, '56912345678', '9-8-1999', 2 );
INSERT 0 1
call list=# INSERT INTO calls(call id, phone, call date, user id) VALUES (10, '56912345678', '8-8-1999', 2 );
INSERT 0 1
call list=# INSERT INTO calls(call id, phone, call date, user id) VALUES (11, '56912345678', '9-8-1999', 2 );
INSERT 0 1
call list=# INSERT INTO calls(call id, phone, call date, user id) VALUES (12, '56912345678', '7-8-1999', 2 );

```

```

SELECT * FROM users, calls WHERE calls.user id = users.user id;

```

user id	username	email	last name	call id	phone	call date	user id
1	Carlos	carlos@carloscorreo.com	Castro	1	5692222222	1999-12-12	1
1	Carlos	carlos@carloscorreo.com	Castro	2	5693333333	1999-11-12	1
1	Carlos	carlos@carloscorreo.com	Castro	3	5692222222	1999-10-12	1
1	Carlos	carlos@carloscorreo.com	Castro	4	5691111111	1999-09-12	1
2	Laura	laura@lauracorreio.com	Lopez	5	5691111111	1999-09-12	2
2	Laura	laura@lauracorreio.com	Lopez	6	56912345678	1999-08-12	2
2	Laura	laura@lauracorreio.com	Lopez	7	56912345678	1999-08-11	2
2	Laura	laura@lauracorreio.com	Lopez	8	56912345678	1999-08-10	2
2	Laura	laura@lauracorreio.com	Lopez	9	56912345678	1999-08-09	2
2	Laura	laura@lauracorreio.com	Lopez	10	56912345678	1999-08-08	2
2	Laura	laura@lauracorreio.com	Lopez	11	56912345678	1999-08-09	2
2	Laura	laura@lauracorreio.com	Lopez	12	56912345678	1999-08-07	2

```

INSERT INTO users(user id, username, email, last name) VALUES
(3, 'Manuel', 'manuel@correiomanuel.com', 'Mora');

```

```

SELECT username, count(call id) FROM users INNER JOIN calls ON (users.user id = calls.user id)
group by username;

```

username	count
Carlos	4
Laura	8

```

SELECT * FROM users, calls WHERE username = 'Carlos' ORDER BY call date desc;

```

user id	username	email	last name	call id	phone	call date	user id
1	Carlos	carlos@carloscorreo.com	Castro	1	5692222222	1999-12-12	1
1	Carlos	carlos@carloscorreo.com	Castro	2	5693333333	1999-11-12	1
1	Carlos	carlos@carloscorreo.com	Castro	3	5692222222	1999-10-12	1

1	Carlos	carlos@carloscorreo.com	Castro	4	5691111111	1999-09-12	1
1	Carlos	carlos@carloscorreo.com	Castro	5	5691111111	1999-09-12	2
1	Carlos	carlos@carloscorreo.com	Castro	6	56912345678	1999-08-12	2
1	Carlos	carlos@carloscorreo.com	Castro	7	56912345678	1999-08-11	2
1	Carlos	carlos@carloscorreo.com	Castro	8	56912345678	1999-08-10	2
1	Carlos	carlos@carloscorreo.com	Castro	9	56912345678	1999-08-09	2
1	Carlos	carlos@carloscorreo.com	Castro	11	56912345678	1999-08-09	2
1	Carlos	carlos@carloscorreo.com	Castro	10	56912345678	1999-08-08	2
1	Carlos	carlos@carloscorreo.com	Castro	12	56912345678	1999-08-07	2

(12 rows)

