

```
C:\Program Files\PostgreSQL\15\bin>psql -U postgres
Password for user postgres:
```

```
psql (15.8, server 17rc1)
WARNING: psql major version 15, server major version 17.
        Some psql features might not work.
WARNING: Console code page (437) differs from Windows code page (1252)
        8-bit characters might not work correctly. See psql reference
        page "Notes for Windows users" for details.
Type "help" for help.
```

```
postgres=# \i 'C:/assignment2.sql'
DROP DATABASE
CREATE DATABASE
psql (15.8, server 17rc1)
WARNING: psql major version 15, server major version 17.
        Some psql features might not work.
You are now connected to database "assignment2" as user "postgres".
```

```
CREATE TABLE
CREATE TABLE
CREATE TABLE
CREATE TABLE
CREATE TABLE
CREATE TABLE
CREATE TABLE
CREATE TABLE
INSERT 0 19
INSERT 0 8
INSERT 0 19
INSERT 0 15
INSERT 0 6
INSERT 0 37
INSERT 0 12
TRUNCATE TABLE
INSERT 0 85
CREATE TABLE
INSERT 0 14
Problem-1a
```

cname	sid	salary
Apple	1002	45000
Netflix	1007	50000
Amazon	1008	50000
Yahoo	1013	55000
Microsoft	1019	50000

(5 rows)

Problem-1b

cname	sid	salary
Apple	1002	45000
Netflix	1007	50000
Yahoo	1013	55000
Microsoft	1019	50000
Amazon	1008	50000

(5 rows)

#### Problem-1c

c	s	sl
Amazon	1008	50000
Microsoft	1019	50000
Yahoo	1013	55000
Netflix	1007	50000
Apple	1002	45000

(5 rows)

#### Problem-2a

sname	salary	city
Jean	65000	Cupertino
Chris	60000	Denver
Latha	60000	LosGatos

(3 rows)

#### Problem-2b

sname	salary	city
Jean	65000	Cupertino
Chris	60000	Denver
Latha	60000	LosGatos

(3 rows)

#### Problem-2c

sname	salary	city
Chris	60000	Denver
Jean	65000	Cupertino
Latha	60000	LosGatos

(3 rows)

#### Problem-3a

cname	cname
Microsoft	Netflix
Microsoft	Google
Microsoft	Apple
Microsoft	Yahoo
Microsoft	IBM
Microsoft	ACM
Netflix	Microsoft
Netflix	Google
Netflix	Apple
Netflix	Yahoo
Netflix	IBM
Netflix	ACM
Google	Microsoft
Google	Netflix
Google	Apple
Google	Yahoo
Google	IBM
Google	ACM

Apple		Microsoft
Apple		Netflix
Apple		Google
Apple		Yahoo
Apple		IBM
Apple		ACM
Yahoo		Microsoft
Yahoo		Netflix
Yahoo		Google
Yahoo		Apple
Yahoo		IBM
Yahoo		ACM
IBM		Microsoft
IBM		Netflix
IBM		Google
IBM		Apple
IBM		Yahoo
IBM		ACM
ACM		Microsoft
ACM		Netflix
ACM		Google
ACM		Apple
ACM		Yahoo
ACM		IBM

(42 rows)

#### Problem-3b

cname		cname
-----+-----		
Apple		Google
Apple		Netflix
Apple		Microsoft
Apple		IBM
Apple		ACM
Apple		Yahoo
Google		Apple
Google		Netflix
Google		Microsoft
Google		IBM
Google		ACM
Google		Yahoo
Netflix		Apple
Netflix		Google
Netflix		Microsoft
Netflix		IBM
Netflix		ACM
Netflix		Yahoo
Microsoft		Apple
Microsoft		Google
Microsoft		Netflix
Microsoft		IBM
Microsoft		ACM
Microsoft		Yahoo
IBM		Apple
IBM		Google
IBM		Netflix
IBM		Microsoft
IBM		ACM

IBM		Yahoo
ACM		Apple
ACM		Google
ACM		Netflix
ACM		Microsoft
ACM		IBM
ACM		Yahoo
Yahoo		Apple
Yahoo		Google
Yahoo		Netflix
Yahoo		Microsoft
Yahoo		IBM
Yahoo		ACM

(42 rows)

# Problem-3c

cname		cname
-----+-----		
Yahoo		Apple
Yahoo		Google
Yahoo		Netflix
Yahoo		Microsoft
Yahoo		IBM
Yahoo		ACM
Apple		Yahoo
Apple		Google
Apple		Netflix
Apple		Microsoft
Apple		IBM
Apple		ACM
Google		Yahoo
Google		Apple
Google		Netflix
Google		Microsoft
Google		IBM
Google		ACM
Netflix		Yahoo
Netflix		Apple
Netflix		Google
Netflix		Microsoft
Netflix		IBM
Netflix		ACM
Microsoft		Yahoo
Microsoft		Apple
Microsoft		Google
Microsoft		Netflix
Microsoft		IBM
Microsoft		ACM
IBM		Yahoo
IBM		Apple
IBM		Google
IBM		Netflix
IBM		Microsoft
IBM		ACM
ACM		Yahoo
ACM		Apple
ACM		Google
ACM		Netflix

ACM		Microsoft
ACM		IBM

(42 rows)

#### Problem-4b

cname		sid		salary
-----	+	-----	+	-----
Amazon		1008		50000
Apple		1002		45000
Microsoft		1019		50000
Netflix		1007		50000
Yahoo		1013		55000

(5 rows)

#### Problem-5b

sname		salary		city
-----	+	-----	+	-----
Chris		60000		Denver
Jean		65000		Cupertino
Latha		60000		LosGatos

(3 rows)

#### Problem-6b

c1		c2
-----	+	-----
ACM		Apple
ACM		Google
ACM		IBM
ACM		Microsoft
ACM		Netflix
ACM		Yahoo
Apple		ACM
Apple		Google
Apple		IBM
Apple		Microsoft
Apple		Netflix
Apple		Yahoo
Google		ACM
Google		Apple
Google		IBM
Google		Microsoft
Google		Netflix
Google		Yahoo
IBM		ACM
IBM		Apple
IBM		Google
IBM		Microsoft
IBM		Netflix
IBM		Yahoo
Microsoft		ACM
Microsoft		Apple
Microsoft		Google
Microsoft		IBM
Microsoft		Netflix
Microsoft		Yahoo
Netflix		ACM

Netflix		Apple
Netflix		Google
Netflix		IBM
Netflix		Microsoft
Netflix		Yahoo
Yahoo		ACM
Yahoo		Apple
Yahoo		Google
Yahoo		IBM
Yahoo		Microsoft
Yahoo		Netflix

(42 rows)

Problem 10

```
SELECT 2
  sid
```

```
-----
1001
1015
```

(2 rows)

Problem 11

```
CREATE FUNCTION
  sid1 | sid2
```

```
-----+-----
1003 | 1019
1003 | 1009
1003 | 1017
1003 | 1015
1003 | 1013
1003 | 1006
1003 | 1001
1003 | 1014
1003 | 1005
1003 | 1004
1003 | 1011
1003 | 1016
1003 | 1012
1003 | 1002
1003 | 1010
1003 | 1007
1003 | 1018
```

(17 rows)

Problem 12

```
CREATE VIEW
  n1 | n2
```

```
-----+-----
1 | 1
2 | 2
2 | 3
2 | 4
3 | 2
3 | 3
3 | 4
4 | 2
```

4		3
4		4
5		5
5		6
5		7
6		5
6		6
6		7
7		5
7		6
7		7
8		8
8		12
8		13
9		9
9		10
9		11
9		14
10		9
10		10
10		11
10		14
11		9
11		10
11		11
11		14
12		8
12		12
12		13
13		8
13		12
13		13
14		9
14		10
14		11
14		14
15		15

(45 rows)

psql (15.8, server 17rc1)

WARNING: psql major version 15, server major version 17.

Some psql features might not work.

You are now connected to database "postgres" as user "postgres".

DROP DATABASE

postgres=#

postgres=#

postgres=#