

Assignment 4: Transaction

1 Create Tables in DataGrip Using PostgreSQL

Create a data table using postgresql:

```
1 create table assignment4 (  
2     id int primary key not null,  
3     name varchar not null,  
4     age int not null,  
5     dept_code int not null,  
6     office_loc varchar not null,  
7     salary int not null  
8 );  
9 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (1, '张三', 22, 1, '宝安', 6000);  
10 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (2, '李四', 31, 1, '宝安', 7000);  
11 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (3, '王五', 25, 2, '福田', 6000);  
12 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (4, '赵六', 24, 1, '宝安', 5000);  
13 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (5, '庄七', 22, 3, '光明', 8000);  
14 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (6, '康八', 45, 2, '福田', 15000);  
15 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (7, '聂九', 34, 3, '光明', 7500);  
16 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (8, '刘二麻子', 56, 4, '光明', 17000);  
17 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (9, '孙小毛', 17, 1, '宝安', 3000);  
18 insert into assignment4 (id, name, age, dept_code, office_loc, salary) values (10, '陈老大', 37, 1, '宝安', 7000);
```

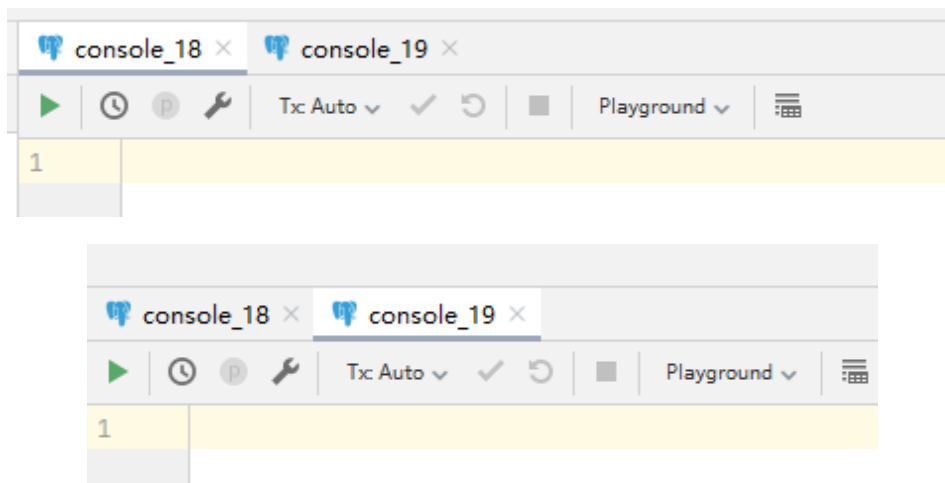
This is a screenshot of the result.

assignment4 ×						
< < 10 rows > > ↺ + - ↶ ↷ ↱ ↲ Tx: Auto ▾ DDL 🔍						
WHERE			ORDER BY			
	id	name	age	dept_code	office_loc	salary
1	1	张三	22	1	宝安	6000
2	2	李四	31	1	宝安	7000
3	3	王五	25	2	福田	6000
4	4	赵六	24	1	宝安	5000
5	5	庄七	22	3	光明	8000
6	6	康八	45	2	福田	15000
7	7	慕九	34	3	光明	7500
8	8	刘二麻子	56	4	光明	17000
9	9	孙小毛	17	1	宝安	3000
10	10	陈老大	37	1	宝安	7000

2 Open Two Consoles, Set Isolation Level as Default in Postgres

2.1 Open Two Consoles

Create two consoles(`console_18` and `console_19`) with empty contents.

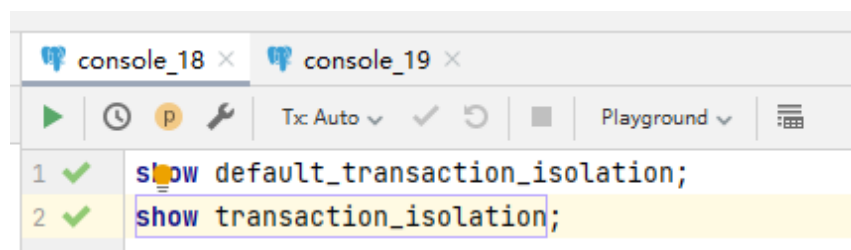


2.2 Set Isolation Level as Default in Postgres

If not set, the isolation level of the database is the **default** value.

We can view the default and current values of the isolation level in two consoles respectively.

2.3 One Console



Output		Result 2	Result 2-2
		1 row	
		default_transaction_isolation	
1	read committed		

Output		Result 2	Result 2-2
		1 row	
		transaction_isolation	
1	read committed		

2.4 The Other Console

console_18		console_19
		Txc Auto
1	✓	show default_transaction_isolation;
2	✓	show transaction_isolation;

Output		Result 3	Result 3-2
		1 row	
		default_transaction_isolation	
1	read committed		

Output		Result 3	Result 3-2
		1 row	
		transaction_isolation	
1	read committed		

3 Execute SQLs and Check Query Results

- ① `select salary from emp where id=5;`

Output postgres.public.assignment4	
1 row	
salary	
1	9000

- ② `select salary from emp where id=5;`

Output postgres.public.assignment4	
1 row	
salary	
1	8000

- ③ `select salary from emp where id=6;`

Output postgres.public.assignment4	
1 row	
salary	
1	15000

- ④ `select salary from emp where id=6;`

Output postgres.public.assignment4	
1 row	
salary	
1	14000

- ⑤ `select salary from emp where id=5;`

Output postgres.public.assignment4	
1 row	
salary	
1	9000

- ⑥ `select salary from emp where id=5;`

Output postgres.public.assignment4	
1 row	
salary	
1	9000

- ⑦ `select salary from emp where id=6;`

Output postgres.public.assignment4	
1 row	
salary	
1	15000

- ⑧ `select salary from emp where id=6;`

Output postgres.public.assignment4	
1 row	
salary	
1	15000

- ⑨ `select salary from emp where id=6;`

Output postgres.public.assignment4	
1 row	
salary	
1	15000

- ⑩ `select salary from emp where id=5;`

Output postgres.public.assignment4	
1 row	
salary	
1	9000