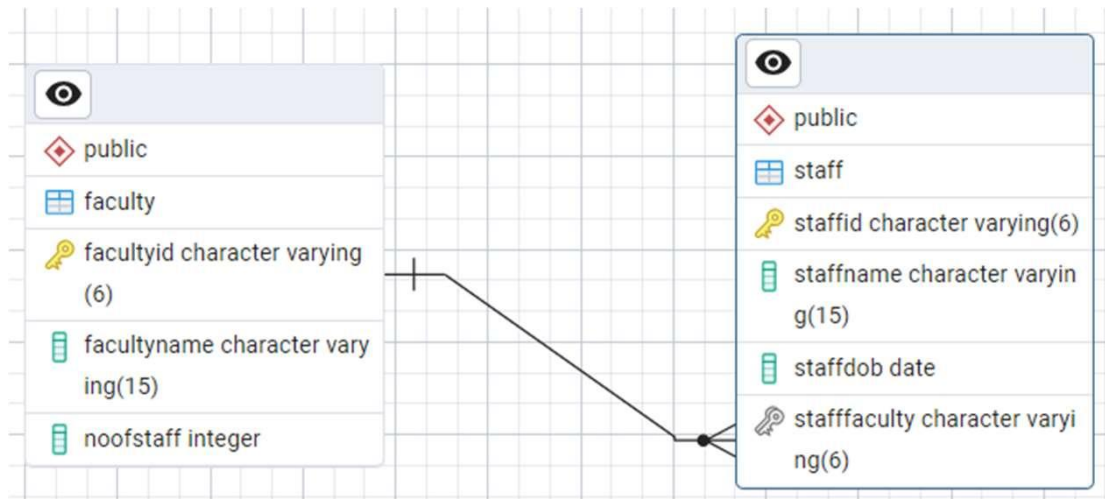


ONLY NUMBER: Conger Yang

1.and2.



3.

```
INSERT INTO staff(staffid,staffname,staffdob,stafffaculty) values('AB9872','Mark White',1978-01-01,'M002'),
('DL2314','Jas Singh',1982-03-14,'M002'),('AF4512','Alison Green',1998-12-23,'C001'),('BK2134','Kieran West',1992-01-16,'B001'),
('FG3124','Lucy Liu',1997-08-03,'E002');
```

It is necessary to fill the faculty table first, because it is related to the stafffaculty in the staff table (foreign key in the staff table) and has the faculty primary key first. Only when writing the code of the staff table can the existing faculty primary key be referenced, otherwise an error will be reported

```

hrsystem=# select * from staff;
 staffid |          staffname          | staffdob |
-----+-----+-----
AB9872  | Mark White                  | 1978-01-01 | M002
DL2314  | Jas Singh                   | 1982-03-14 | M002
AF4512  | Alison Green                | 1998-12-23 | C001
BK2134  | Kieran West                 | 1992-01-16 | B001
FG3124  | Lucy Liu                    | 1997-08-03 | E002
(5 行记录)

hrsystem=# select * from faculty;
 facultyid |          facultyname          | noofstaff
-----+-----+-----
C001      | Computing                    | 120
E002      | Engineering                   | 76
M002      | Mathermatics                  | 56
B001      | Business                      | 89
(4 行记录)

```

4.a

```

hrsystem=# select * from staff;
 staffid |          staffname          | staffdob |
-----+-----+-----
AB9872  | Mark White                  | 1978-01-01 | M002
DL2314  | Jas Singh                   | 1982-03-14 | M002
AF4512  | Alison Green                | 1998-12-23 | C001
BK2134  | Kieran West                 | 1992-01-16 | B001
FG3124  | Lucy Liu                    | 1997-08-03 | E002
(5 行记录)

```

b.

```

hrsystem=# select * from faculty where noofstaff > 75;
 facultyid |          facultyname          | noofstaff
-----+-----+-----
C001      | Computing                    | 120
E002      | Engineering                   | 76
B001      | Business                      | 89
(3 行记录)

```

C.

```
hrsystem=# select * from staff where staffdob > '1980-1-1';
staffid |          staffname          | staffdob |
-----+-----+-----+
DL2314  | Jas Singh                   | 1982-03-14 | M002
AF4512  | Alison Green                | 1998-12-23 | C001
BK2134  | Kieran West                 | 1992-01-16 | B001
FG3124  | Lucy Liu                   | 1997-08-03 | E002
(4 行记录)
```

d.

```
hrsystem=# select * from staff;
id | name | date of birth | Faculty id
---+---+---+
AB9872 | Mark White | 1978-01-01 | M002
DL2314 | Jas Singh | 1982-03-14 | M002
AF4512 | Alison Green | 1998-12-23 | C001
BK2134 | Kieran West | 1992-01-16 | B001
FG3124 | Lucy Liu | 1997-08-03 | E002
```

e.

```
hrsystem=# select *from staff;
id | name | date of birth | Faculty id
---+---+---+
AB9872 | Mark White | 1978-01-01 | M002
DL2314 | Jas Singh | 1982-03-14 | M002
AF4512 | Alison Green | 1998-12-23 | C001
BK2134 | Kieran West | 1992-01-16 | B001
FG3124 | Lucy Liu | 1997-08-03 | E002
(5 行记录)

hrsystem=# select *from faculty;
facultyid | facultyname | noofstaff
-----+-----+-----
E002 | Engineering | 76
M002 | Mathematics | 56
B001 | Business | 89
C001 | Engineering | 120
(4 行记录)
```

F.

```

hrsystem=# select *from staff;
   id  |          name          | date of birth | Faculty id
-----+-----+-----+-----
AB9872 | Mark White             | 1978-01-01   | M002
DL2314 | Jas Singh              | 1982-03-14   | M002
AF4512 | Alison Green           | 1998-12-23   | C001
FG3124 | Lucy Liu               | 1997-08-03   | E002
(4 行记录)

hrsystem=# select *from faculty;
 facultyid | facultyname | noofstaff
-----+-----+-----
E002      | Engineering |        76
M002      | Mathematics |        56
C001      | Engineering |       120
(3 行记录)

```

6.

a.

```

bank=# select 28964 * 1.85;
?column?
-----
53583.40
(1 行记录)

bank=# select 28,964 * 1.85;
?column? | ?column?
-----+-----
28 | 1783.40
(1 行记录)

```

b.

```
bank=# select first_name,last_name from employee;
first_name | last_name
```

Michael	Smith
Susan	Barker
Robert	Tyler
Susan	Hawthorne
John	Gooding
Helen	Fleming
Chris	Tucker
Sarah	Tucker
Jane	Grossman
Paula	Roberts
Thomas	Ziegler
Samantha	Jameson
John	Blake
Cindy	Mason
Frank	Portman
THERESA	Markham
Beth	Fowler
Rick	Tulman

(18 行记录)

C.

```
bank=# select distinct product_type_cd from product;
product_type_cd
```

ACCOUNT
LOAN

(2 行记录)

d.

```
bank=# select * from product where product_type_cd='LOAN';
```

product_cd	date_offered	date_retired	name	product_type_cd
MRT	2000-01-01		home mortgage	LOAN
AUT	2000-01-01		auto loan	LOAN
BUS	2000-01-01		business line of credit	LOAN
SBL	2000-01-01		small business loan	LOAN

(4 行记录)

e.

```
1 select * from employee where first_name like 'S%';
```

Data Output Messages Notifications

	emp_id [PK] numeric (10)	end_date date	first_name character varying (20)	last_name character varying (20)	start_date date	title character varying (20)	assigned_branch_id numeric (10)	dept_id numeric (10)	superior_id numeric (10)
1		2 [null]	Susan	Barker	2002-09-12	Vice President	1		3
2		4 [null]	Susan	Hawthorne	2004-04-24	Operations Manager	1	1	
3		8 [null]	Sarah	Tucker	2002-12-02	Teller	1	1	
4		12 [null]	Samantha	Jameson	2003-01-08	Teller	2	1	

f.

```
select * from employee where (first_name like 'S%' OR FIRST_NAME LIKE 'T%') and dept_id=1;
```

Output Messages Notifications

	emp_id [PK] numeric (10)	end_date date	first_name character varying (20)	last_name character varying (20)	start_date date	title character varying (20)	assigned_branch_id numeric (10)	dept_id numeric (10)	superior_id numeric (10)
	4 [null]		Susan	Hawthorne	2004-04-24	Operations Manager	1	1	
	8 [null]		Sarah	Tucker	2002-12-02	Teller	1	1	
	11 [null]		Thomas	Ziegler	2000-10-23	Teller	2	1	
	12 [null]		Samantha	Jameson	2003-01-08	Teller	2	1	
	16 [null]		THERESA	Markham	2001-03-15	Head Teller	4	1	

g.

```
SELECT FIRST_NAME='Susan' or FIRST_NAME='Helen' or FIRST_NAME='P
```

Output Messages Notifications

emp_id [PK] numeric (10)	first_name character varying (20)	last_name character varying (20)
2	Susan	Barker
4	Susan	Hawthorne
6	Helen	Fleming
10	Paula	Roberts

h.

```
1
2 SELECT * from 关闭employee where start_date between '2001-01-01' and '2002-12-31';
3
```

Data Output Messages Notifications									
<div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>SQL</div></div>									
	end_date	first_name	last_name	start_date	title	assigned_branch_id	dept_id	superior_emp_id	
	date	character varying (20)	character varying (20)	date	character varying (20)	numeric (10)	numeric (10)	numeric (10)	
1	[null]	Michael	Smith	2001-06-22	President	1	3	[null]	
2	[null]	Susan	Barker	2002-09-12	Vice President	1	3	1	
3	[null]	Robert	Tyler	2002-02-09	Treasurer	1	3	1	
4	[null]	Sarah	Tucker	2002-12-02	Teller	1	1	6	
5	[null]	Jane	Grossman	2002-05-03	Teller	1	1	6	
6	[null]	Paula	Roberts	2002-07-27	Head Teller	2	1	4	
7	[null]	Cindy	Mason	2002-08-09	Teller	3	1	13	
8	[null]	THERESA	Markham	2001-03-15	Head Teller	4	1	4	
9	[null]	Beth	Fowler	2002-06-29	Teller	4	1	16	
10	[null]	Rick	Tulman	2002-12-12	Teller	4	1	16	

i.

















```
select * from customer where fed_id like '%-%-%'
```

Output Messages Notifications

	<div><div>cust_type_cd</div><div>character varying (1)</div></div>	<div><div>fed_id</div><div>character varying (12)</div></div>	<div><div>postal_code</div><div>character varying (10)</div></div>	<div><div>state</div><div>character varying (2)</div></div>
	I	999-99-9999	2458	MA
	I	888-88-8888	3079	NH
	I	777-77-7777	1887	MA
	I	666-66-6666	2451	MA
	I	444-44-4444	2451	MA
	I	333-33-3333	2169	MA
	I	222-22-2222	1801	MA
	I	111-11-1111	1940	MA

j.

```
select * from product order by product_type_cd asc,name desc ;
```

Output		Messages	Notifications		
					
					
 date_offered  date	 date_retired  date	 name character varying (50)	 product_type_cd character varying (255)		
2000-01-01	[null]	savings account	ACCOUNT		
2000-01-01	[null]	money market account	ACCOUNT		
2000-01-01	[null]	checking account	ACCOUNT		
2000-01-01	[null]	certificate of deposit	ACCOUNT		
2000-01-01	[null]	small business loan	LOAN		
2000-01-01	[null]	home mortgage	LOAN		
2000-01-01	[null]	business line of credit	LOAN		
2000-01-01	[null]	auto loan	LOAN		

k.

```
select * from employee where title='teller' order by start_date
```

Output Messages Notifications				
id	last_name	start_date	title	assigned_b
ing (20)	character varying (20)	date	character varying (20)	numeric (10)
	Ziegler	2000-10-23	Teller	
	Grossman	2002-05-03	Teller	
	Fowler	2002-06-29	Teller	
	Mason	2002-08-09	Teller	
	Tucker	2002-12-02	Teller	
	Tulman	2002-12-12	Teller	
	Jameson	2003-01-08	Teller	
	Portman	2003-04-01	Teller	
	Tucker	2004-09-15	Teller	

I.

1)








```
select account_id,product_cd,avail_balance,pending_balance fro
```

Output Messages Notifications

SQL

account_id	product_cd	avail_balance	pending_balance
[PK] integer	character varying (10)	numeric (14,2)	numeric (14,2)
1	CHK	1057.75	1057.75
2	SAV	500.00	500.00
3	CD	3000.00	3000.00

```
update account set avail_balance=avail_balance * 1.02 ,pending
select cust_id,product_cd,avail_balance,pending_balance from a
```

Output Messages Notifications				
				
		SQL		
cust_id numeric (10)	product_cd character varying (10)	avail_balance numeric (14,2)	pending_balance numeric (14,2)	
1	CHK	1144.95	1144.95	
1	SAV	541.21	541.21	
1	CD	3247.29	3247.29	

2)

m.

```
1 select count(*) from acc_transaction where txn_date='2003/7/30';
```

Data Output Messages Notifications



	count bigint	
1		2

Query

Query History

1

SELECT COUNT(*) FROM acc_transaction WHERE txn_date = '2003/7/30'

2

delete from acc_transaction where txn_date = '2003/7/30'

Data Output

Messages

Notifications










SQL

count

bigint

N.

```
om account where avail_balance > 10000 order by avail_balance desc
```

Output			Messages	Notifications		
						
						
account_id	cust_id	avail_balance				
[PK] integer	numeric (10)	numeric (14,2)				
23	12	50000.00				
22	12	38552.05				
20	10	23575.12				

0.


```
select distinct city,state from customer where state='NH' order
```

Output		Messages	Notifications		
					
		SQL			
city		state			
character varying (20)		character varying (20)			
Salem		NH			
Wilmington		NH			

p.

```

1 update individual set last_name='Brown' where cust_id=2;
2 select * from individual order by cust_id asc;

```

Data Output Messages Notifications					
	cust_id [PK] integer	birth_date date	first_name character varying (255)	last_name character varying (255)	
1	1	1972-04-22	James	Hadley	
2	2	1968-08-15	Susan	Brown	
3	3	1958-02-06	Frank	Tucker	
4	4	1966-12-22	John	Hayward	
5	5	1971-08-25	Charles	Frasier	
6	6	1962-09-14	John	Spencer	
7	7	1947-03-19	Margaret	Young	
8	8	1977-07-01	Louis	Blake	
9	9	1968-06-16	Richard	Farley	

q.

1

```
select * from individual where birth_date<'1965-01-01';
```

Data Output

Messages

Notifications

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📈

SQL

	cust_id [PK] integer	birth_date date	first_name character varying (255)	last_name character varying (255)
1	3	1958-02-06	Frank	Tucker
2	7	1947-03-19	Margaret	Young
3	6	1962-09-14	John	Spencer

r.

Query Query History



```
1 employee set end_date='2019/11/01' where first_name='Thomas' and |
2 from employee order by emp_id asc;
```

Data Output Messages Notifications













	emp_id [PK] numeric (10)	end_date date	first_name character varying (20)	last_name character varying (20)
1	1	[null]	Michael	Smith
2	2	[null]	Susan	Barker
3	3	[null]	Robert	Tyler
4	4	[null]	Susan	Hawthorne
5	5	[null]	John	Gooding
6	6	[null]	Helen	Fleming
7	7	[null]	Chris	Tucker
8	8	[null]	Sarah	Tucker
9	9	[null]	Jane	Grossman
10	10	[null]	Paula	Roberts
11	11	2019-11-01	Thomas	Ziegler
12	12	[null]	Samantha	Jameson

Total rows: 18 of 18 Query complete 00:00:00.082 Ln 1, Col 73

S.

```
1 select * from account where product_cd='SAV' ORDER BY AVAIL_BALANCE DESC;
```

Data Output Messages Notifications

	 avail_balance numeric (14,2)	 close_date date	 last_activity_date date	 open_date date	 pending_balance numeric (14,2)	 status character varying (10)	 cust_id numeric (10)	 open_branch_id numeric (10)	 open_emp_id numeric (10)	 product_cd character varying (10)
1	9	767.77	[null]	2004-10-24	2000-01-15	767.77	ACTIVE	4	1	8 SAV
2	2	541.21	[null]	2005-12-19	2001-01-15	541.21	ACTIVE	1	2	10 SAV
3	16	387.99	[null]	2004-10-12	2001-05-23	387.99	ACTIVE	8	4	18 SAV
4	5	200.00	[null]	2004-12-11	2001-03-12	200.00	ACTIVE	2	2	11 SAV