w17-p1: create user_51 in postgreSQL server, enter two data, the first one is about your

w17-p2: create cart_51 in postgreSQL server, enter five data, one for each category


```sql
INSERT INTO cart_51(cart_id, user_id, product_id, amount)
VALUES
    (1,1,6,1),
    (2,1,15,2),
    (3,1,20,1),
    (4,1,28,3),
    (5,1,35,2)

/*
CREATE TABLE cart_51(
    cart_id int,
    user_id int REFERENCES user_51 ON DELETE SET NULL ON UPDATE CASCADE,
    product_id int REFERENCES shop_51 ON DELETE SET NULL ON UPDATE CASCADE,
    amount int,
    PRIMARY KEY(cart_id)
)
*/
```

Data Output   Explain   Messages   Notifications

INSERT 0 5

Query returned successfully in 29 msec.

w17-p3: give query to get related data for cart info shown in ejs


```sql
SELECT cart_id, U.name as user_name, S.name as product_name, price, amount, S.remote_url as image
FROM cart_51 as C, user_51 as U, shop_51 as S
WHERE C.user_id = U.user_id AND C.product_id = S.id
```

cart_id integer	user_name character varying (255)	product_name character varying	price real	amount integer	image character varying
1	1	henry	Brown Brim	25	1	https://i.ibb.co/ZYW3VTp/brown-brim.png
2	2	henry	Black Jean Shearling	125	2	https://i.ibb.co/XzcwL5s/black-shearling.png
3	3	henry	Adidas NMD	220	1	https://i.ibb.co/0s3pdnc/adidas-nmd.png
4	4	henry	Blue Tanktop	25	3	https://i.ibb.co/7CQVJNm/blue-tank.png
5	5	henry	Camo Down Vest	325	2	https://i.ibb.co/xJS0T3Y/camo-vest.png

w17-p4: insert data in order to violate the key constraints, foreign key constraints

Tree view:
- 1..3 Sequences
- Tables (5)
  - book_51
  - cart_51
    - Columns (4)
      - cart_id
      - user_id
      - product_id
      - amount
    - Constraints (3)
      - cart_51_pkey
      - cart_51_product_id_fkey
      - cart_51_user_id_fkey
  - Indexes
  - RLS Policies

```
1  INSERT INTO cart_51(cart_id,user_id,product_id,amount)
2  VALUES
3      (1,3,6,1)
```

ERROR: duplicate key value violates unique constraint "cart_51_pkey"
DETAIL: Key (cart_id)=(1) already exists.
SQL state: 23505


```
1  INSERT INTO cart_51(cart_id,user_id,product_id,amount)
2  VALUES
3      (6,3,6,1)
```

ERROR: insert or update on table "cart_51" violates foreign key constraint "cart_51_user_id_fkey"
DETAIL: Key (user_id)=(3) is not present in table "user_51".
SQL state: 23503


```
1  INSERT INTO cart_51(cart_id,user_id,product_id,amount)
2  VALUES
3      (6,1,5,1)
```

ERROR: insert or update on table "cart_51" violates foreign key constraint "cart_51_product_id_fkey"
DETAIL: Key (product_id)=(5) is not present in table "shop_51".
SQL state: 23503

w17-p5.1: test ON UPDATE CASCASE

crown_51
- > Casts
- > Catalogs
- > Event Triggers
- > Extensions
- > Foreign Data Wrappers
- > Languages
- > Publications
- ✓ Schemas (1)
  - ✓ public
    - > Aggregates
    - > Collations
    - > Domains
    - > FTS Configurations
    - > FTS Dictionaries
    - > FTS Parsers
    - > FTS Templates
    - > Foreign Tables
    - > Functions
    - > Materialized Views
    - > Operators
    - > Procedures
    - > Sequences
    - ✓ Tables (5)
      - > book_51
      - ✓ cart_51
        - ✓ Columns (4)
          - cart_id
          - user_id
          - product_id
          - amount
        - ✓ Constraints (3)
          - cart_51_pkey
          - cart_51_product_id_fkey
          - cart_51_user_id_fkey
      - > Indexes
      - > RLS Policies

Data Output   Explain   Messages   Notifications

	cart_id [PK] integer	user_id integer	product_id integer	amount integer
1	1	1	6	1
2	2	1	15	2
3	3	1	20	1
4	4	1	28	3
5	5	1	35	2
6	6	1	6	1
7	7	7	10	1
8	8	8	20	2

	cart_id [PK] integer	user_id integer	product_id integer	amount integer
7	7	5	10	1
8	8	5	20	2

w17-p5.2: test ON DELETE SET NULL

Database Tree

- PostgreSQL 14
  - Databases (7)
    - 0519_excel_import
    - crown_51
      - Casts
      - Catalogs
      - Event Triggers
      - Extensions
      - Foreign Data Wrappers
      - Languages
      - Publications
      - Schemas (1)
        - public
          - Aggregates
          - Collations
          - Domains
          - FTS Configurations
          - FTS Dictionaries
          - FTS Parsers
          - FTS Templates
          - Foreign Tables
          - Functions
          - Materialized Views
          - Operators
          - Procedures
          - Sequences
          - Tables (5)
            - book_51
            - cart_51
              - Columns (4)
                - cart_id
                - user_id
                - product_id
                - amount

Query Editor

Query Editor   Query History

```
1   SELECT * FROM public.user_51
2   ORDER BY user_id ASC
```

Data Output   Explain   Messages   Notifications
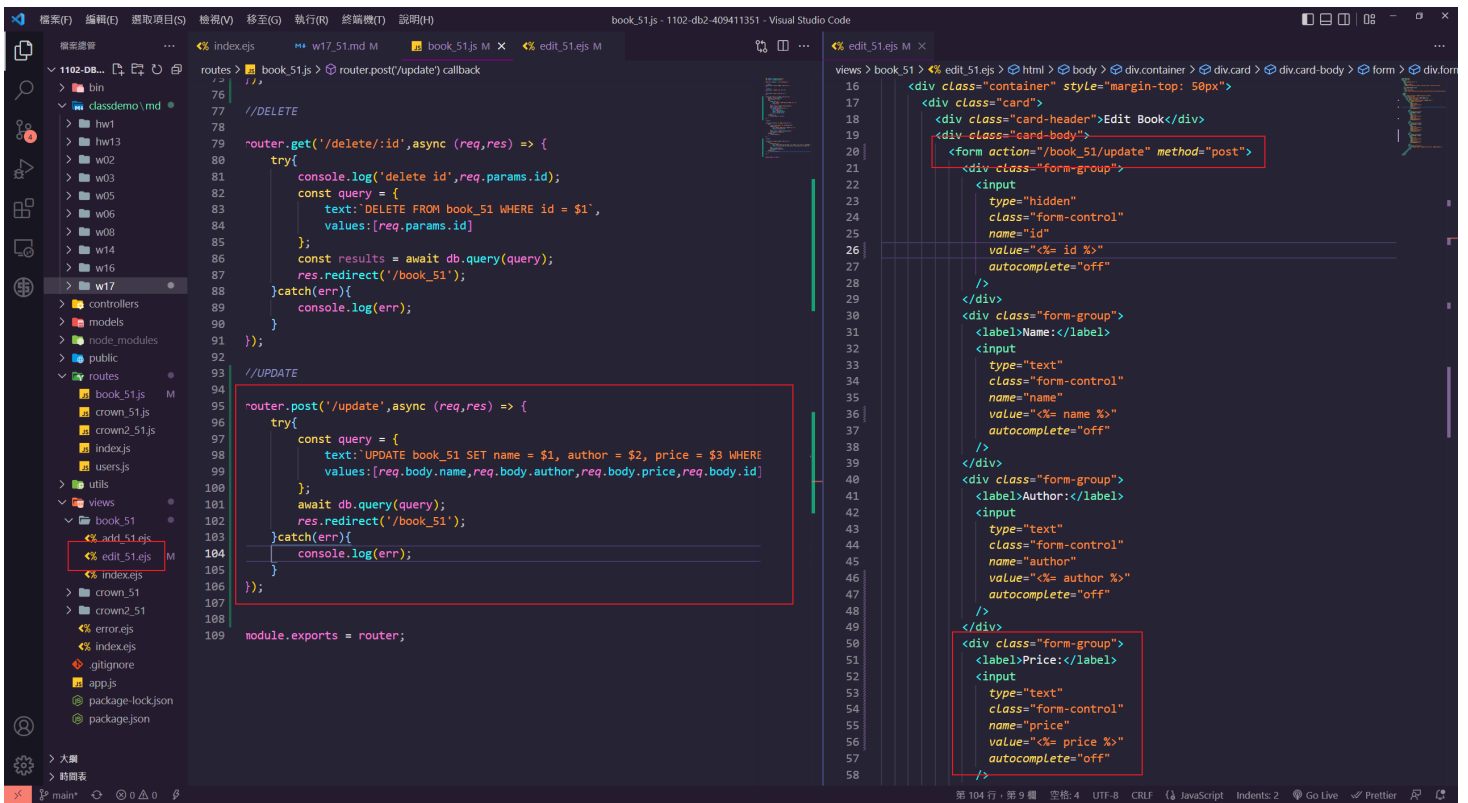
user_id [PK] integer	name character varying (255)	email character varying (255)
1	henry	409411351@gms.tku.edu.tw
2	john	john@gmail.com

w17-p6: implement /book_51/delete/:id

w17-p7: implement /book_51/update

w17-LAST-log


```
git log --pretty=format:"%h%x09%an%x09%ad%x09%s" --after="2022-06-13"

4561d3d Darkking789      Tue Jun 14 18:22:29 2022 +0800  w17-p7: implement /book_51/update
76096c1 Darkking789      Tue Jun 14 17:51:06 2022 +0800  w17-p6: implement /book_51/delete/:id
f62859d Darkking789      Tue Jun 14 17:19:42 2022 +0800  w17-p5.1: test ON UPDATE CASCASE w17-p5.2: test ON DELETE
e23ed6e Darkking789      Tue Jun 14 17:04:47 2022 +0800  ### w17-p4: insert data in order to violate the key const
400f2cf Darkking789      Tue Jun 14 16:40:34 2022 +0800  ### w17-p3: give query to get related data for cart info
e384fe6 Darkking789      Tue Jun 14 16:12:25 2022 +0800  ### w17-p2: create cart_51 in postgreSQL server, enter fi
468edb8 Darkking789      Tue Jun 14 15:50:30 2022 +0800  ### w17-p1: create user_51 in postgreSQL server, enter tw
```