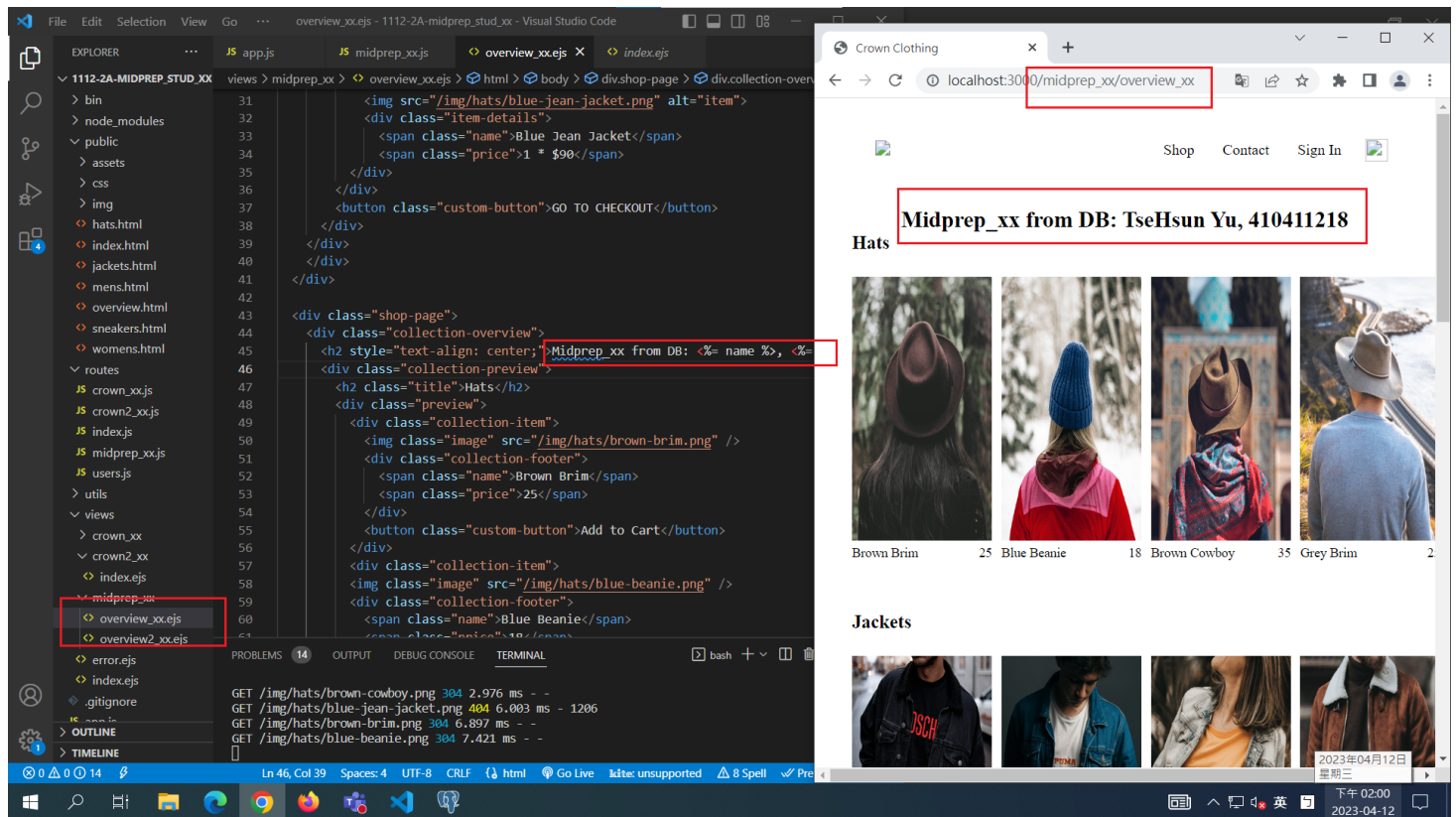


W09-P1: Midprep P1 answer



W09-P2: Midprep P2 answer

The screenshot shows the pgAdmin 4 interface. In the left sidebar, the 'Tables (2)' folder is expanded, and 'product_18' is selected. The main pane displays the SQL query editor with the following code:

```
1 CREATE TABLE product_18 (  
2   pid int NOT NULL PRIMARY KEY,  
3   pname varchar(255),  
4   price real,  
5   cat_id int,  
6   img_url varchar(255),  
7   FOREIGN KEY (cat_id) REFERENCES category_18(id)  
8   ON DELETE SET NULL  
9   ON UPDATE CASCADE  
10 );
```

The 'Messages' tab shows the successful execution of the query:

```
CREATE TABLE  
Query returned successfully in 39 msec.
```

A notification banner at the top right states: "You are currently running version 6.15 of pgAdmin 4, however the current version is 6.20. Please click [here](#) for more information."

The status bar at the bottom indicates "Total rows: 0 of 0" and "Query complete 00:00:00.039".

The screenshot shows the pgAdmin 4 interface. In the left sidebar, the 'Tables (2)' folder is expanded, and 'product_18' is selected. The main pane displays the SQL query editor with the following code:

```
1 SELECT * FROM public.product_18  
2 ORDER BY pid ASC
```

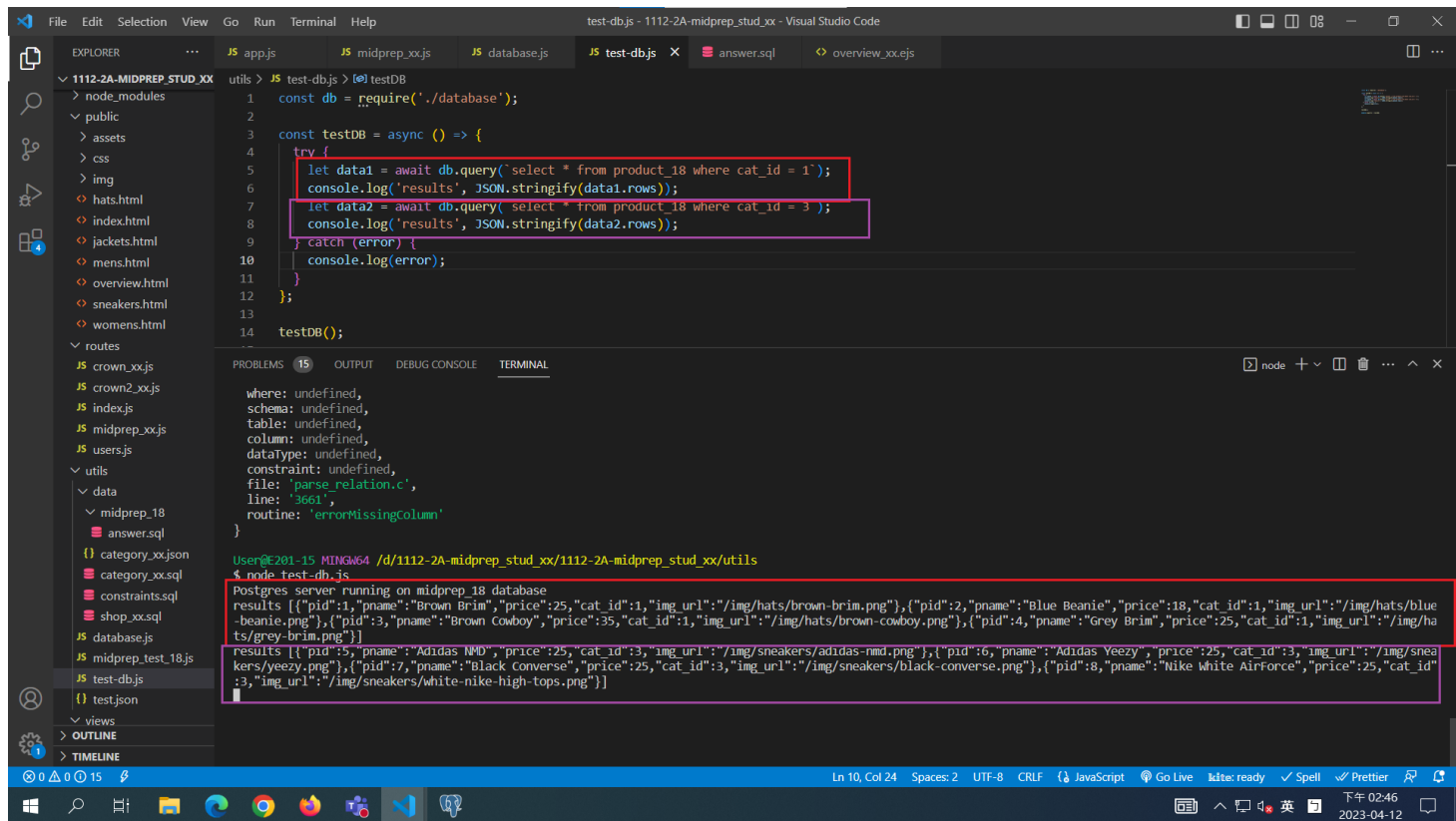
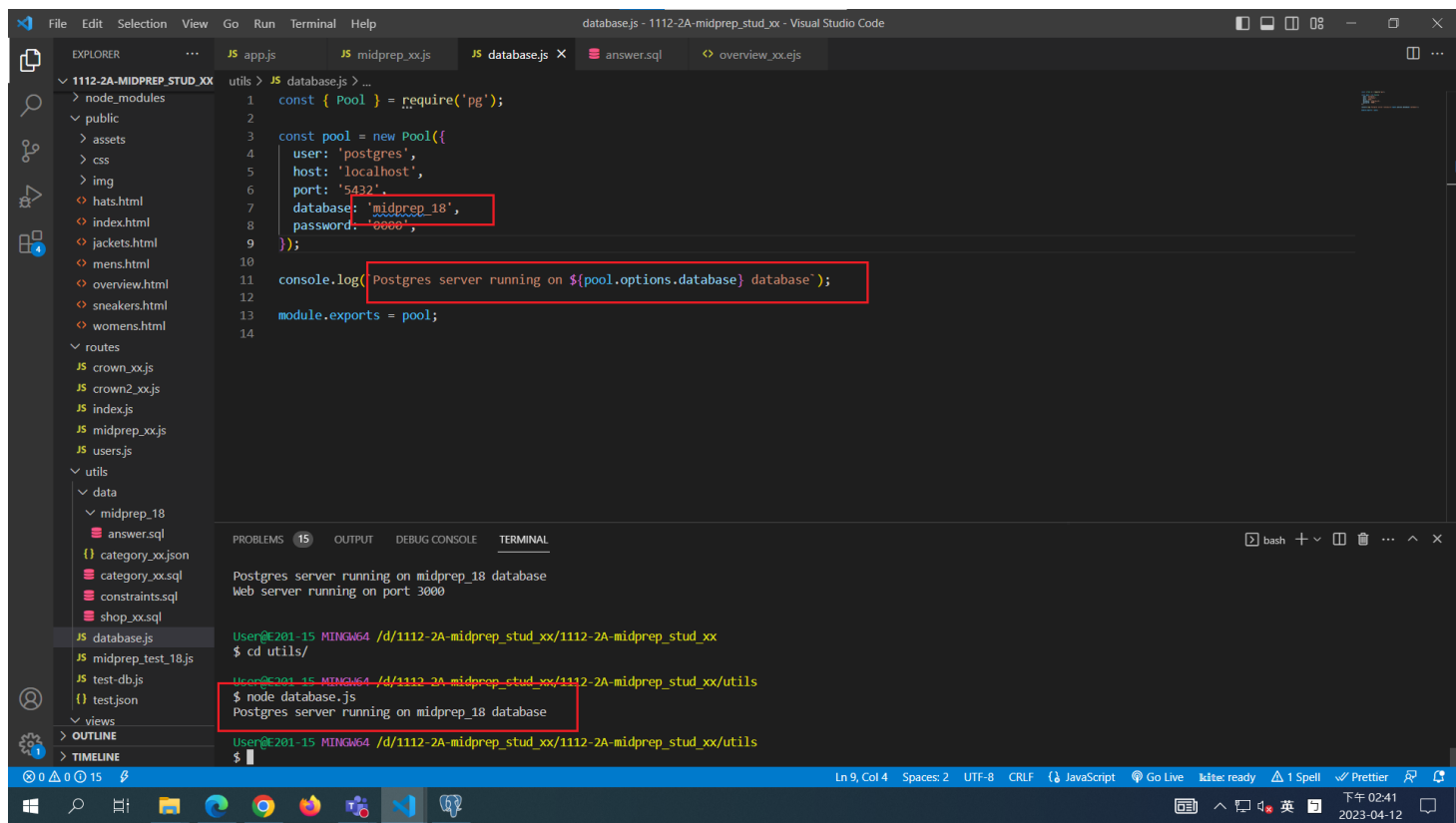
The 'Data Output' tab shows the results of the query:

	pid [PK] integer	pname character varying (255)	price real	cat_id integer	img_url character varying (255)
1	1	Brown Brim	25	1	/img/hats/brown-brim.png
2	2	Blue Beanie	18	1	/img/hats/blue-beanie.png
3	3	Brown Cowboy	35	1	/img/hats/brown-cowboy.png
4	4	Grey Brim	25	1	/img/hats/grey-brim.png
5	5	Adidas NMD	25	3	/img/sneakers/adidas-nmd.png
6	6	Adidas Yeezy	25	3	/img/sneakers/yeezy.png
7	7	Black Converse	25	3	/img/sneakers/black-converse.png
8	8	Nike White AirForce	25	3	/img/sneakers/white-nike-high-tops.png

A notification banner at the top right states: "You are currently running version 6.15 of pgAdmin 4, however the current version is 6.20. Please click [here](#) for more information."

The status bar at the bottom indicates "Total rows: 8 of 8" and "Query complete 00:00:00.184".

W09-P3: Midprep P3 answer



The image shows a Visual Studio Code editor with a project named 'midprep_xx.js'. The file explorer on the left shows the project structure, including 'routes' and 'views' folders. The 'routes' folder contains 'crown_xx.js', 'crown2_xx.js', 'index.js', 'midprep_xx.js', 'users.js', and 'utils.js'. The 'views' folder contains 'crown_xx', 'crown2_xx', 'midprep_xx', 'overview_xx.ejs', 'overview2_xx.ejs', 'error.ejs', 'index.ejs', and 'gitignore'. The 'midprep_xx.js' file is selected, showing the following code:

```
11 /* GET overview2_xx. */
12 router.get('/overview2_xx', async function (req, res, next) {
13   try {
14     // 1 % 5 = 1
15     let data1 = await db.query(`
16       select P.pName, P.price, P.img_url, C.name
17       from product_18 as P, category_18 as C
18       where P.cat_id = C.id and P.cat_id = 1
19     `);
20
21     // 8 % 5 = 3
22     let data2 = await db.query(`
23       select P.pName, P.price, P.img_url, C.name
24       from product_18 as P, category_18 as C
25       where P.cat_id = C.id and P.cat_id = 3
26     `);
27
28     console.log('midprep data1', JSON.stringify(data1.rows));
29     console.log('midprep data2', JSON.stringify(data2.rows));
30
31     res.render('midprep_xx/overview2_xx', {
32       data1: data1.rows,
```

The terminal at the bottom shows the output of the application, including the JSON data for the 'overview2_xx' route:

```
GET /midprep_xx/overview2_xx - ms - -
GET / 304 1.394 ms - -
GET /css/style.css 304 1.119 ms - -
GET /assets/crown.svg 304 1.101 ms - -
GET /assets/shopping-bag.svg 304 0.447 ms - -
midprep data1 [{"pname":"Brown Brim","price":25,"img_url":"/img/hats/brown-brim.png","name":"hats"}, {"pname":"Blue Beanie","price":18,"img_url":"/img/hats/blue-beanie.png","name":"hats"}, {"pname":"Brown Cowboy","price":35,"img_url":"/img/hats/brown-cowboy.png","name":"hats"}, {"pname":"Grey Brim","price":25,"img_url":"/img/hats/grey-brim.png","name":"hats"}]
midprep data2 [{"pname":"Adidas NMD","price":25,"img_url":"/img/sneakers/adidas-nmd.png","name":"sneakers"}, {"pname":"Adidas Yeezy","price":25,"img_url":"/img/sneakers/yeezy.png","name":"sneakers"}, {"pname":"Black Converse","price":25,"img_url":"/img/sneakers/black-converse.png","name":"sneakers"}, {"pname":"Nike White AirForce","price":25,"img_url":"/img/sneakers/white-nike-high-tops.png","name":"sneakers"}]
GET /midprep_xx/overview2_xx 200 31.375 ms - 5053
GET /css/style.css 304 1.171 ms - -
GET /assets/crown.svg 304 1.163 ms - -
GET /assets/shopping-bag.svg 304 2.622 ms - -
GET /img/hats/blue-jean-jacket.png 404 2.036 ms - 1206
```

W09-P5: ON UPDATE CASCADE

pgAdmin 4

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 - product_18
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- textbook
- world

8/po... public.product... public.category_18/midprep_18/postgres@PostgreSQL 15

public.category_18/midprep_18/postgres@PostgreSQL 15

Query Query History

```
1 SELECT * FROM public.category_18
2 ORDER BY id ASC
```

Scratch Pad

Data Output Messages Notifications

	id [PK] integer	name character varying (255)	size character varying (20)	local_url character varying (255)	remote_url character varying (255)	link_url character varying (255)
1	6	hats	[null]	/img/homepage/hats.png	https://i.libb.co/cvptL1/hats.png	/crown2_18/shop_18/hats
2	2	jackets	[null]	/img/homepage/jackets.png	https://i.libb.co/px2tCc3/jackets.png	/crown2_18/shop_18/jackets
3	3	sneakers	[null]	/img/homepage/sneakers.png	https://i.libb.co/0jqHnp/sneakers.png	/crown2_18/shop_18/sneakers
4	4	womens	large	https://i.libb.co/GCCdy8t/womens.png	/img/homepage/womens.png	/crown2_18/shop_18/womens
5	5	mens	large	https://i.libb.co/R70vBrQ/men.png	/img/homepage/mens.png	/crown2_18/shop_18/mens

Total rows: 5 of 5 Query complete 00:00:00.093 Ln 1, Col 1

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pgAdmin 4

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 - Foreign Tables
 - Functions
 - Materialized Views
 - Operators
 - Procedures
 - Sequences
 - Tables (2)
 - category_18
 - product_18
 - Trigger Functions
 - Types
 - Views
- postgres
- store
- textbook
- world

8/po... public.product_18/midprep_18/postgres@PostgreSQL 15 public.categor...

public.product_18/midprep_18/postgres@PostgreSQL 15

Query Query History

```
1 SELECT * FROM public.product_18
2 ORDER BY pid ASC
```

Scratch Pad

Data Output Messages Notifications

	pid [PK] integer	pname character varying (255)	price real	cat_id integer	img_url character varying (255)
1	1	Brown Brim	25	6	/img/hats/brown-brim.png
2	2	Blue Beanie	18	6	/img/hats/blue-beanie.png
3	3	Brown Cowboy	35	6	/img/hats/brown-cowboy.png
4	4	Grey Brim	25	6	/img/hats/grey-brim.png
5	5	Adidas NMD	25	3	/img/sneakers/adidas-nmd.png
6	6	Adidas Yeezy	25	3	/img/sneakers/yeezy.png
7	7	Black Converse	25	3	/img/sneakers/black-converse.png
8	8	Nike White AirForce	25	3	/img/sneakers/white-nike-high-tops.png

Total rows: 8 of 8 Query complete 00:00:00.048 Ln 1, Col 1

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W09-P6: ON DELETE SET NULL

pgAdmin 4

File Object Tools Help

Browser

8/po... public.product... public.category_18/midprep_18/postgres@PostgreSQL 15

public.category_18/midprep_18/postgres@PostgreSQL 15

Query Query History

```
1 SELECT * FROM public.category_18
2 ORDER BY id ASC
```

Scratch Pad

Data Output Messages Notifications

	id [PK] integer	name character varying (255)	size character varying (20)	local_url character varying (255)	remote_url character varying (255)	link_url character varying (255)
1	6	hats	[null]	/img/homepage/hats.png	https://i.ibb.co/cvpntL1/hats.png	/crown2_18/shop_18/hats
2	2	jackets	[null]	/img/homepage/jackets.png	https://i.ibb.co/px2tCc3/jackets.png	/crown2_18/shop_18/jackets
3	4	womens	large	https://i.ibb.co/GCCdy8t/womens.png	/img/homepage/womens.png	/crown2_18/shop_18/womens
4	5	mens	large	https://i.ibb.co/R70vBrQ/men.png	/img/homepage/mens.png	/crown2_18/shop_18/mens

Total rows: 5 of 5 Query complete 00:00:00.093 Ln 1, Col 1

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pgAdmin 4

File Object Tools Help

Browser

8/po... public.product_18/midprep_18/postgres@PostgreSQL 15 public.categor...

public.product_18/midprep_18/postgres@PostgreSQL 15

Query Query History

```
1 SELECT * FROM public.product_18
2 ORDER BY pid ASC
```

Scratch Pad

Data Output Messages Notifications

	pid [PK] integer	pname character varying (255)	price real	cat_id integer	img_url character varying (255)
1	1	Brown Brim	25	6	/img/hats/brown-brim.png
2	2	Blue Beanie	18	6	/img/hats/blue-beanie.png
3	3	Brown Cowboy	35	6	/img/hats/brown-cowboy.png
4	4	Grey Brim	25	6	/img/hats/grey-brim.png
5	5	Adidas NMD	25	[null]	/img/sneakers/adidas-nmd.png
6	6	Adidas Yeezy	25	[null]	/img/sneakers/yeezy.png
7	7	Black Converse	25	[null]	/img/sneakers/black-converse.png
8	8	Nike White AirForce	25	[null]	/img/sneakers/white-nike-high-tops.png

Total rows: 8 of 8 Query complete 00:00:00.128 Ln 1, Col 1

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