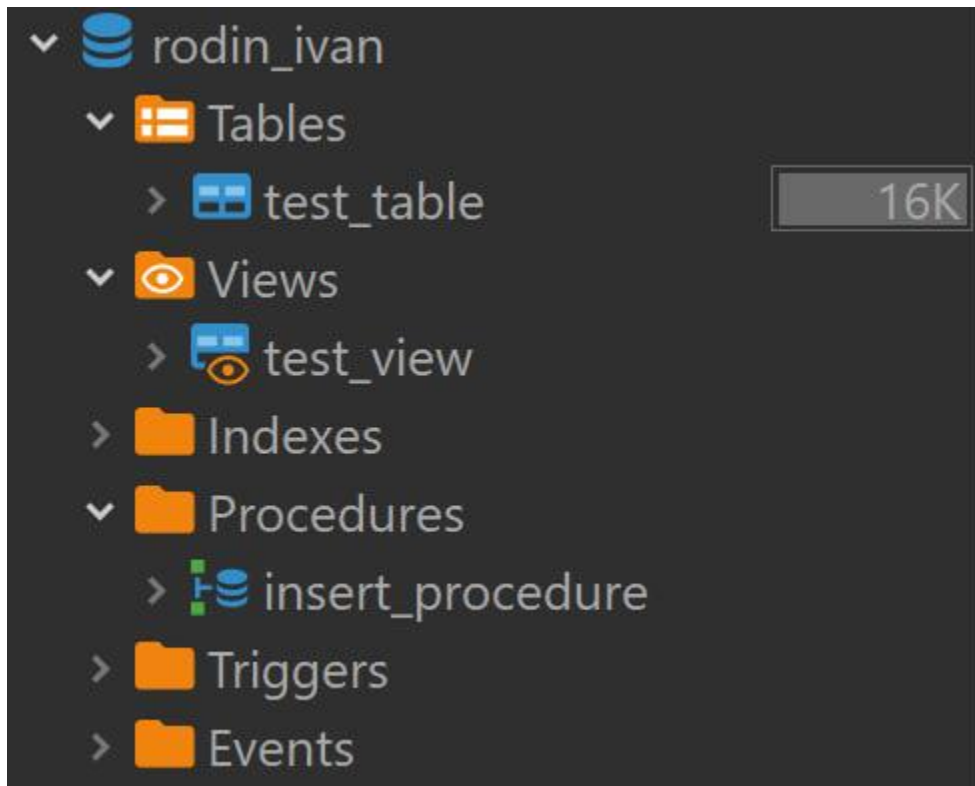


Established connection, created table, view and procedure:



Script can be found in SQL_Scripts/AWS_Task_4_1.sql

Query to find top 3 actors by income for 1st store:



Output		Result set 1 (3)	
Rows returned (3)		<div>Export to csv</div>	
<div>Search rows</div>		<div>< 1 > ⚙</div>	
actor_full_name		total_sales	
GINA DEGENERES		1881.09	
MICHAEL BOLGER		1431.77	
CAMERON ZELLWEGER		1369.05	

Launched EC2 instance, used it as SSH tunnel to connect to Aurora:

MainDriver propertiesSSHSSL

Use SSH Tunnel

Profile:

Settings

Host/IP:

ec2-18-185-86-127.eu-central-1.compute.amazonaws.com

Port:

22

User Name:

ec2-user

Authentication Method:

Public Key

Private Key:

C:\Users\ivanr\Downloads\EC2_PostgreSQL_Server_Ivan_Rodin.ppk

Passphrase

Save credentials

Jump servers

Advanced settings

Main
Driver properties
SSH
SSL

Server

Connect by:
☒ Host
☐ URL

URL:
jdbc:mysql://dilab-aurora-cluster.cluster-cqlpneuyr8on.eu-central-1.rds.amazonaws.com:3306/sakila

Server Host:
dilab-aurora-cluster.cluster-cqlpneuyr8on.eu-central-1.rds.amazonaws.com
Port:
3306

Database:
sakila

Authentication (Database Native)

Username:
admin

Password:
••••••••
☒ Save password

Advanced

Server Time Zone:
Auto-detect

Local Client:
MySQL Binaries

Connection variables information
Database documentation

Driver name:
MySQL
Driver Settings
Driver license

Same query and same results now in Dbeaver:

DBeaver 24.1.4 - <sakila> Script-64
File Edit Navigate Search SQL Editor Database Window Help

Database Navigator
actor
<sakila> Script-64

```

select
CONCAT_WS(' ', a.first_name, a.last_name) as actor_full_name, sum(p.amount) as total_sales
from sakila.actor a
inner join sakila.film_actor fa on a.actor_id = fa.actor_id
inner join sakila.film f on fa.film_id = f.film_id
inner join sakila.inventory i on i.film_id = f.film_id
inner join sakila.store s on i.store_id = s.store_id
inner join sakila.rental r on i.inventory_id = r.inventory_id
inner join sakila.payment p on p.rental_id = r.rental_id
where s.store_id = 1
group by a.actor_id
order by sum(p.amount) desc
limit 3;

```

Results 1

	actor_full_name	total_sales
1	GINA DEGENERES	1,881.09
2	MICHAEL BOLGER	1,431.77
3	CAMERON ZELLWEGER	1,369.05

GET en Writable Smart Insert 13:9:546 Sel: 0 | 0

We can't connect directly because Aurora operates in VPC (Virtual Private Cloud) and has no public IP.

Created table manually:

DynamoDB > Explore items > rodin_customers_table

> rodin_customers_table Autopreview View table details

▶ Scan or query items
Expand to query or scan items.

✓ Completed. Read capacity units consumed: 0.5

Items returned (4) Refresh Actions Create item

	CustomerID (Number)	RegistrationDate (String)	age	country	full_name	sex
<input type="checkbox"/>	4	2020-01-21		England	Kevin Orwell	M
<input type="checkbox"/>	3	2000-03-20	30	Equador		
<input type="checkbox"/>	2	2001-01-01	29		Jack Jup	
<input type="checkbox"/>	1	2000-01-01			Jane Johnson	F

Created table using AWS CLI:

```
PS C:\Users\ivanr\aws> aws dynamodb create-table --table-name rodin_customers_cli_table --attribute-definitions AttributeName=customer_id,AttributeType=N
AttributeName=registration_date,AttributeType=S --key-schema AttributeName=customer_id,KeyType=HASH AttributeName=registration_date,KeyType=RANGE --provisio
ned-throughput ReadCapacityUnits=5,WriteCapacityUnits=5 --region eu-central-1 --profile students-role
TABLEDESCRIPTION 2024-09-06T19:46:34.226000+04:00 False 0 arn:aws:dynamodb:eu-central-1:260586643565:table/rodin_customers_cli_table
21dc29c4-1078-4924-bc74-8a128c556dac rodin_customers_cli_table 0 CREATING
ATTRIBUTEDEFINITIONS customer_id N
ATTRIBUTEDEFINITIONS registration_date S
KEYSCHEMA customer_id HASH
KEYSCHEMA registration_date RANGE
PROVISIONEDTHROUGHPUT 0 5 5
```

All further CLI tasks were made using batch json files.

You can find them in JSON_Batch/<name_of_file>.

Inserted with 21 rows:

```
PS C:\Users\ivanr\OneDrive\Рабочий стол\SW Courses\EPAM DAE 2024\4.AWS\AWS_Task_4> aws dynamodb batch-write-item --request-items file://batch_dynamodb_21row
s.json --region eu-central-1 --profile students-role
```

DynamoDB > Explore items > rodin_customers_cli_table

> rodin_customers_cli_table Autopreview View table details

► Scan or query items
Expand to query or scan items.

✔ Completed. Read capacity units consumed: 0.5

Items returned (21) Refresh Actions Create item

< 1 > Settings Help

<input type="checkbox"/>	customer_id (Number) ▾	registration_date (String) ▾	customer_na... ▾	email ▾
<input type="checkbox"/>	7	2024-09-07	Grace Lee	grace.lee@example.com
<input type="checkbox"/>	8	2024-09-08	Henry Walker	henry.walker@example.com
<input type="checkbox"/>	10	2024-09-10	Jack Young	jack.young@example.com
<input type="checkbox"/>	3	2024-09-03	Carol Davis	carol.davis@example.com

Retrieved 6 rows:

```
PS C:\Users\ivanr\OneDrive\Рабочий стол\SW Courses\EPAM DAE 2024\4.AWS\AWS_Task_4> aws dynamodb batch-get-item --request-items file://batch_get_6rows.json --region eu-central-1 --profile students-role
CUSTOMER_ID      6
CUSTOMER_NAME    Frank Brown
EMAIL            frank.brown@example.com
REGISTRATION_DATE 2024-09-06
CUSTOMER_ID      2
CUSTOMER_NAME    Bob Johnson
EMAIL            bob.johnson@example.com
REGISTRATION_DATE 2024-09-02
CUSTOMER_ID      1
CUSTOMER_NAME    Alice Smith
EMAIL            alice.smith@example.com
REGISTRATION_DATE 2024-09-01
CUSTOMER_ID      3
CUSTOMER_NAME    Carol Davis
EMAIL            carol.davis@example.com
REGISTRATION_DATE 2024-09-03
CUSTOMER_ID      4
CUSTOMER_NAME    David Wilson
EMAIL            david.wilson@example.com
REGISTRATION_DATE 2024-09-04
CUSTOMER_ID      5
CUSTOMER_NAME    Emma Martinez
EMAIL            emma.martinez@example.com
REGISTRATION_DATE 2024-09-05
```

Made selects in PartiQL Editor:

```
select * from rodin_customers_cli_table;
```

✔ Completed

Started on 06.09.2024, 20:33:54

Elapsed time 110ms

Items returned (21)

Download results to CSV

🔍 Find items

< 1 > ⚙️

customer_id ▾	registration_date ▾	email ▾	customer_name ▾
7	2024-09-07	grace.lee@...	Grace Lee
8	2024-09-08	henry.walke...	Henry Walker
10	2024-09-10	jack.young...	Jack Young
3	2024-09-03	carol.davis...	Carol Davis
2	2024-09-02	bob.johnso...	Bob Johnson
21	2024-09-21	ulysses.gra...	Ulysses Gray
14	2024-09-14	nathan.scot...	Nathan Scott

```
select * from rodin_customers_cli_table
where registration_date > '2024-09-08';
```

✔ Completed

Started on 06.09.2024, 20:34:58

Elapsed time 88ms

Items returned (13)

Download results to CSV

🔍 Find items

< 1 > ⚙️

customer_id ▾	registration_date ▾	email ▾	customer_name ▾
10	2024-09-10	jack.young...	Jack Young
21	2024-09-21	ulysses.gra...	Ulysses Gray
14	2024-09-14	nathan.scot...	Nathan Scott
18	2024-09-18	rachel.carte...	Rachel Carter
12	2024-09-12	liam.wright...	Liam Wright
9	2024-09-09	ivy.hall@ex...	Ivy Hall
13	2024-09-13	mia.harris@...	Mia Harris
16	2024-09-16	paul.adams...	Paul Adams
17	2024-09-17	quincy.bake...	Quincy Baker

```
select * from rodin_customers_cli_table
```

```
where customer_name = 'Ivy Hall';
```

✔ Completed

Started on 06.09.2024, 20:35:28

Elapsed time 94ms

Items returned (1)

Download results to CSV

🔍 Find items

< 1 > ⚙️

customer_id ▾	registration_date ▾	email ▾	customer_name ▾
9	2024-09-09	ivy.hall@ex...	Ivy Hall

Deleted 2 rows:

```
PS C:\Users\ivanr\OneDrive\Рабочий стол\SW Courses\EPAM DAE 2024\4.AWS\AWS_Task_4> aws dynamodb batch-write-item --request-items file://batch_delete_2rows.j
son --region eu-central-1 --profile students-role
PS C:\Users\ivanr\OneDrive\Рабочий стол\SW Courses\EPAM DAE 2024\4.AWS\AWS_Task_4>
```

Items returned (19)					<input type="button" value="Actions"/> <input type="button" value="Create item"/>	
					<input type="button" value="1"/> <input type="button" value="Settings"/> <input type="button" value="Close"/>	
<input type="checkbox"/>	customer_id (Number) ▲	registration_date (String) ▼	customer_na... ▼	email ▼		
<input type="checkbox"/>	3	2024-09-03	Carol Davis	carol.davis...		
<input type="checkbox"/>	4	2024-09-04	David Wilson	david.wilso...		
<input type="checkbox"/>	5	2024-09-05	Emma Martinez	emma.mart...		
<input type="checkbox"/>	6	2024-09-06	Frank Brown	frank.brow...		
<input type="checkbox"/>	7	2024-09-07	Grace Lee	grace.lee@...		
<input type="checkbox"/>	8	2024-09-08	Henry Walker	henry.walke...		
<input type="checkbox"/>	9	2024-09-09	Ivy Hall	ivy.hall@ex...		
<input type="checkbox"/>	10	2024-09-10	Jack Young	jack.young...		
<input type="checkbox"/>	11	2024-09-11	Katherine Allen	katherine.al...		
<input type="checkbox"/>	12	2024-09-12	Liam Wright	liam.wright...		
<input type="checkbox"/>	13	2024-09-13	Mia Harris	mia.harris@...		
<input type="checkbox"/>	14	2024-09-14	Nathan Scott	nathan.scot...		

All batch json files you can find in JSON_Batch/<name_of_file>.