

Предмет	МДК07.01. Управление и автоматизация баз данных
Курс	4
Семестр	2
Работа	39
Группа	494
Фамилия	Зубкова
Имя	Валерия
Отчество	Геннадьевна

Отчет

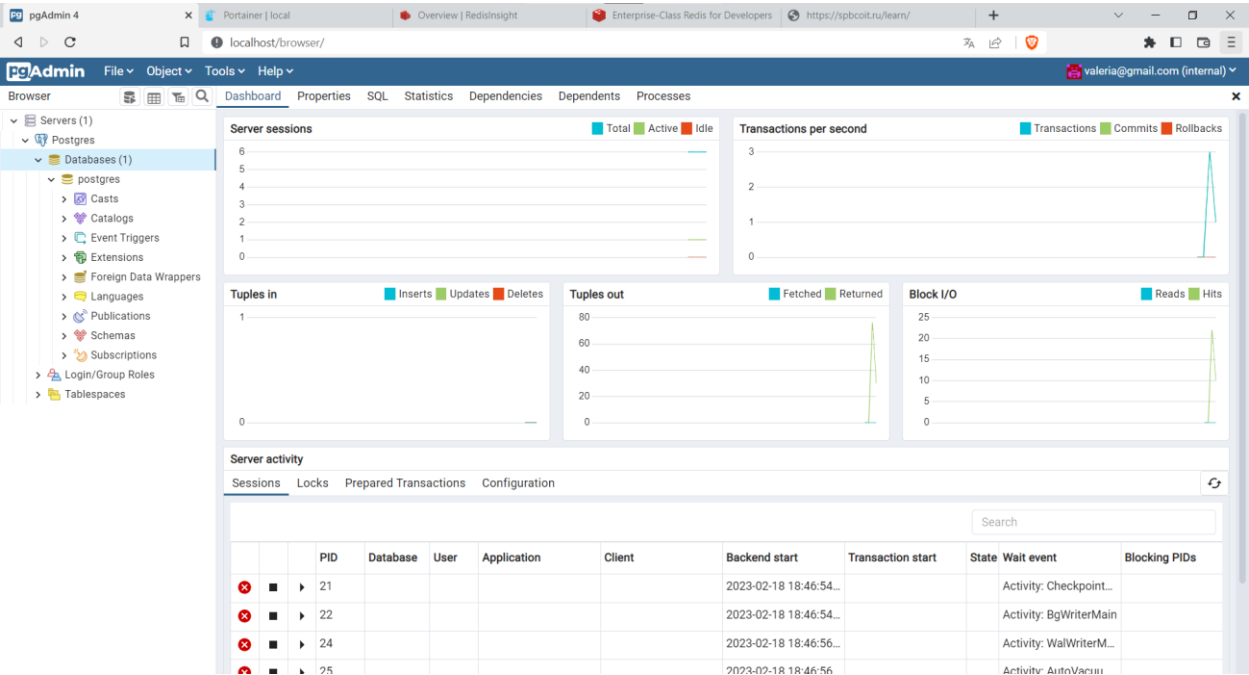
Список запущенных контейнеров

pgAdmin 4Portainer | localOverview | RedisinsightEnterprise-Class Redis for Developershttps://spbcoit.ru/learn/localhost:9000/#/2/docker/containers

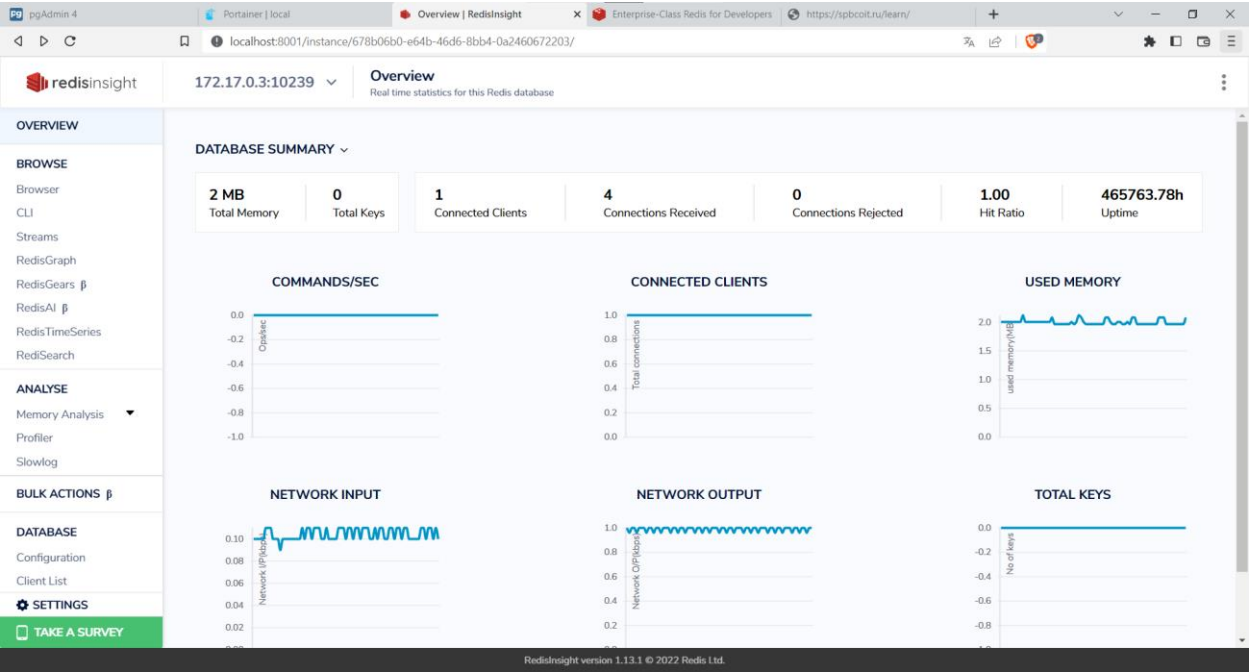
ContainersContainer listContainer list ContainersSearch...StartStopKillRestartPauseResumeRemoveAdd containerItems per page 10

Name	State	Filter	Quick Actions	Stack	Image	Created	IP Address	GPUs	Published Ports	Ownership
new_portainer	running			-	portainer/portainer	2022-12-10 19:20:58	172.17.0.5	none	1234:9000	administrators
pgadmin	running			-	dpage/pgadmin4	2022-12-10 20:25:30	172.17.0.3	none	8888:80	administrators
postgres	running			-	postgres:alpine	2022-12-10 19:39:31	172.17.0.4	none	5432:5432	administrators
redis-server	running			-	redislabs/redismod:latest	2022-12-11 19:14:05	172.17.0.2	none	6379:6379	administrators
xenodochial_elion	exited			-	test/test	2022-12-10 21:46:25	172.17.0.5	none	2345:5432	administrators

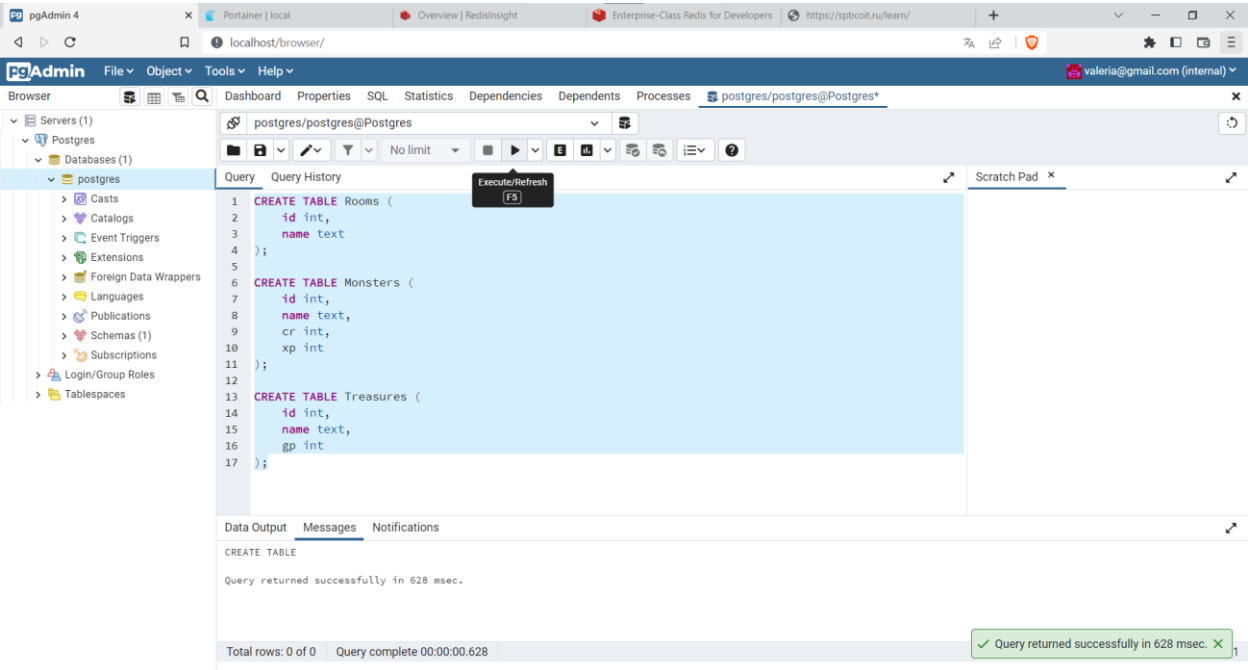
Подключенный postgres



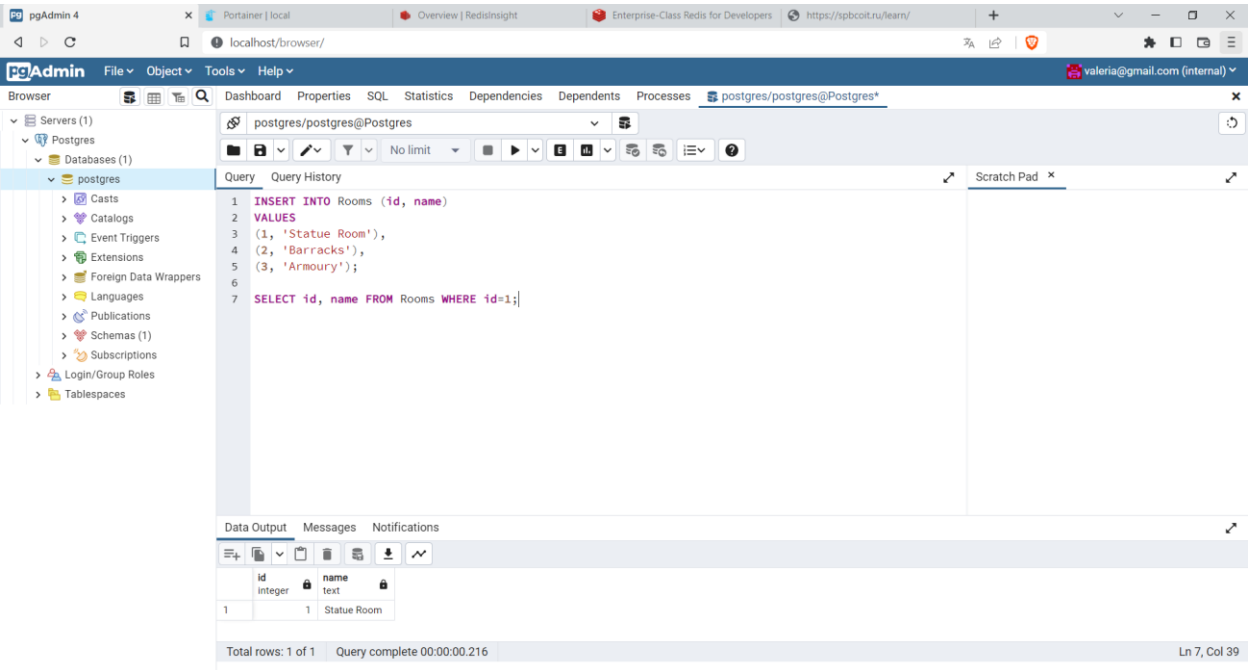
Подключенный Redis



Создание таблиц



Заполнение таблицы Rooms



Заполнение таблицы Monsters

The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'postgres' database. The 'Query' tab is active, displaying the following SQL script:

```
1 INSERT INTO Monsters (id, name, cr, xp)
2 VALUES
3 (1, 'Alice the Elf', 4, 250),
4 (2, 'Bob the Ogre', 7, 460);
5
6 SELECT id, name FROM Monsters;
```

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

id	name
1	Alice the Elf
2	Bob the Ogre

At the bottom, a status bar indicates: "Total rows: 2 of 2 Query complete 00:00:00.050" and a green message box says "Successfully run. Total query runtime: 50 msec. 2 rows affected."

Заполнение таблицы Treasures

The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'postgres' database. The 'Query' tab is active, displaying the following SQL script:

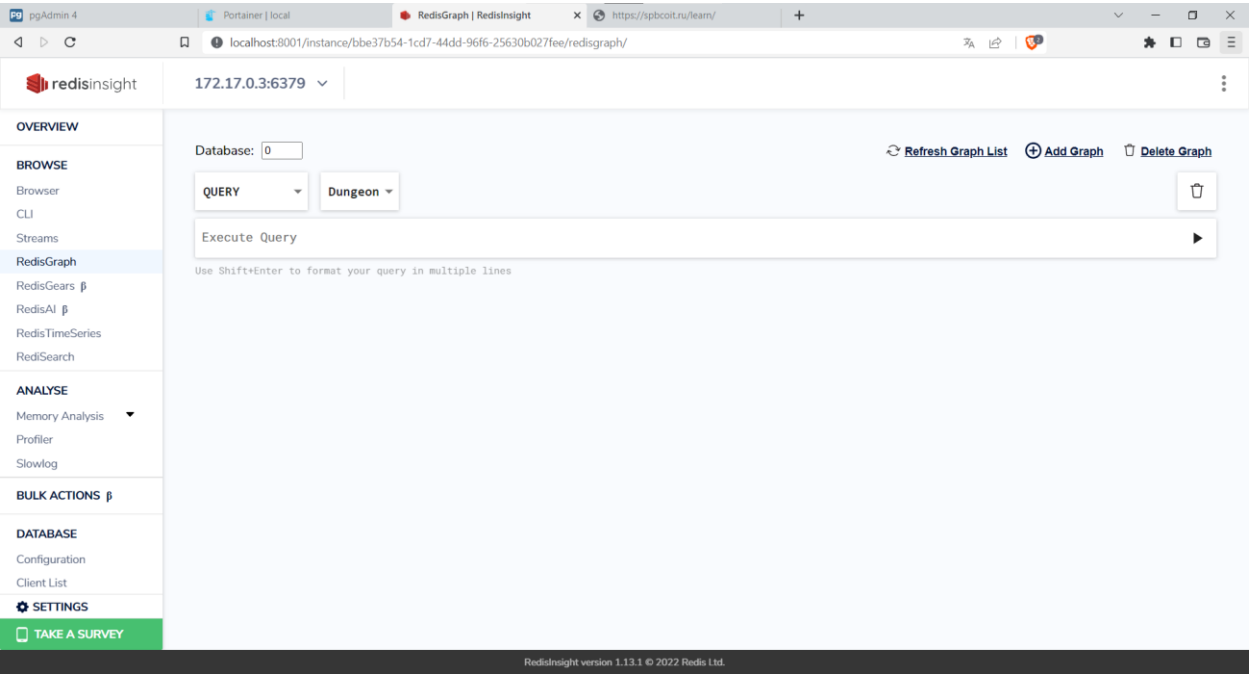
```
1 INSERT INTO Treasures (id, name, gp)
2 VALUES
3 (1, '+1 sword', 250),
4 (2, 'coins', 460);
5
6 SELECT id, name, gp FROM Treasures;
```

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

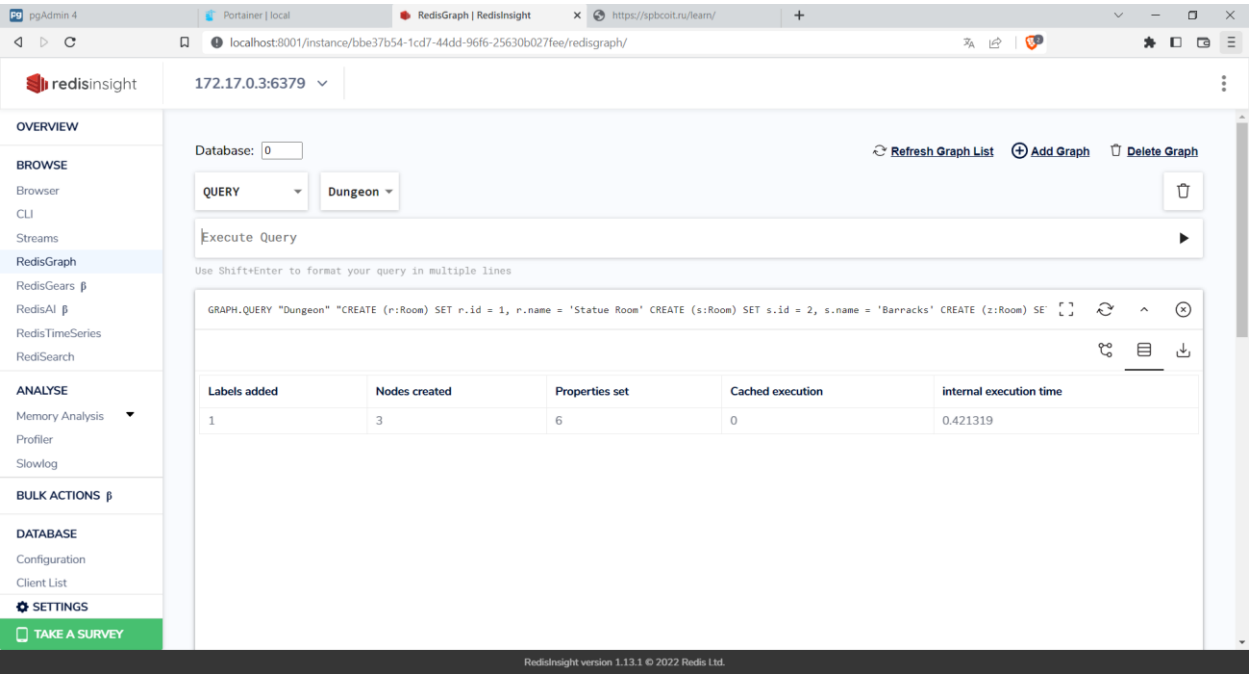
id	name	gp
1	+1 sword	250
2	coins	460

At the bottom, a status bar indicates: "Total rows: 2 of 2 Query complete 00:00:00.050" and the text "Ln 1, Col 1" is visible on the right.

Создание графа Dungeon



Добавление трех вершин Rooms



Выборка 1 вершины с id=1

redisinsight

172.17.0.3:6379

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GRAPH_QUERY "Dungeon" "MATCH (r:Room) WHERE r.id=1 RETURN r"

Room(1)

Statue Room

GRAPH_QUERY "Dungeon" "CREATE (r:Room) SET r.id = 1, r.name = 'Statue Room' CREATE (s:Room) SET s.id = 2, s.name = 'Barracks' CREATE (z:Room) SE"

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Обновление вершины

redisinsight

172.17.0.3:6379

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QUERY

Dungeon

Execute Query

GRAPH_QUERY "Dungeon" "MATCH (r:ROOM) WHERE r.id=1 SET r.name = \"Statue Hall\""

Cached execution	Internal execution time
0	0.164688

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Вывод обновленной вершины

redisinsight

172.17.0.3:6379

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Execute Query

GRAPH_QUERY "Dungeon" "MATCH (r:ROOM) WHERE r.id=1 RETURN r"

Cached execution	internal execution time
1	0.083547

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Удаление объекта

redisinsight

172.17.0.3:6379

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Database: 0

Refresh Graph List

Add Graph

Delete Graph

QUERY

Dungeon

Execute Query

GRAPH_QUERY "Dungeon" "MATCH (r:Room {id:1}) DELETE r"

Nodes deleted	Cached execution	internal execution time
1	0	1.498957

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Проверка удаления объекта

pgAdmin 4

Portainer | local

RedisGraph | Redisinsight

https://apbcoit.ru/learn/

Redisgraph delete one obj

redis - How to remove an

GRAPH.DELETE | Redis

localhost:8001/RedisGraph | Redisinsight -44dd-96f6-25630b027fee/redisgraph/localhost:8001

redisinsight172.17.0.3:6379

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Dungeon

Execute Query

Use Shift+Enter to format your query in multiple lines

GRAPH.QUERY "Dungeon" "MATCH (r:Room {id:1}) RETURN r"

Cached execution	internal execution time
0	1.150725

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Создание новой вершины

pgAdmin 4

Portainer | local

RedisGraph | Redisinsight

https://apbcoit.ru/learn/

Redisgraph delete one obj

redis - How to remove an

GRAPH.DELETE | Redis

localhost:8001/instance/bbe37b54-1cd7-44dd-96f6-25630b027fee/redisgraph/localhost:8001

redisinsight172.17.0.3:6379

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Dungeon

Execute Query

Use Shift+Enter to format your query in multiple lines

GRAPH.QUERY "Dungeon" "CREATE (:Room {id: 1, name: \"Statue Room\"})"

Nodes created	Properties set	Cached execution	internal execution time
1	2	0	0.830746

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Добавление двух объектов в Monsters

pgAdmin 4

Portainer | local

RedisGraph | Redisinsight

https://apbcoit.ru/learn/

Redisgraph delete one obj

redis - How to remove an

GRAPH.DELETE | Redis

localhost:8001/instance/bbe37b54-1cd7-44dd-96f6-25630b027fee/redisgraph/

redisinsight

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Execute Query

Use Shift+Enter to format your query in multiple lines

GRAPH.QUERY "Dungeon" "CREATE (:Monster {id: 4, cr: 5, xp: 100, name: 'Alice the Elf'}) CREATE (:Monster {id:0, cr:5, xp:9, name: 'Bob the Ogre'})"

Labels added	Nodes created	Properties set	Cached execution	internal execution time
1	2	8	0	0.670255

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Проверка создания Monsters

pgAdmin 4

Portainer | local

RedisGraph | Redisinsight

https://apbcoit.ru/learn/

Redisgraph delete one obj

redis - How to remove an

GRAPH.DELETE | Redis

localhost:8001/instance/bbe37b54-1cd7-44dd-96f6-25630b027fee/redisgraph/

redisinsight

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QUERY

Dungeon

Execute Query

Use Shift+Enter to format your query in multiple lines

GRAPH.QUERY "Dungeon" "MATCH (m:Monster) RETURN m"

Monster(2)

Alice the Elf

Bob the Ogre

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Добавление 2 объектов в Treasure

The screenshot shows the RedisInsight web interface. On the left is a sidebar with navigation options: OVERVIEW, BROWSE (containing Browser, CLI, Streams, RedisGraph, RedisGears, RedisAI, RedisTimeSeries, and RedisSearch), ANALYSE (containing Memory Analysis, Profiler, and Slowlog), BULK ACTIONS, DATABASE (containing Configuration and Client List), and SETTINGS. A 'TAKE A SURVEY' button is at the bottom of the sidebar. The main panel is titled '172.17.0.3:6379' and has tabs for 'QUERY' and 'Dungeon'. The 'QUERY' tab is active, showing a text input area with the query: `GRAPH.QUERY "Dungeon" "CREATE (:Treasure {id:6, gp:10, name: '+1 sword'}) CREATE (:Treasure {id: 7, gp: 250, name: 'Coins'})"`. Below the input is a table with the following data:

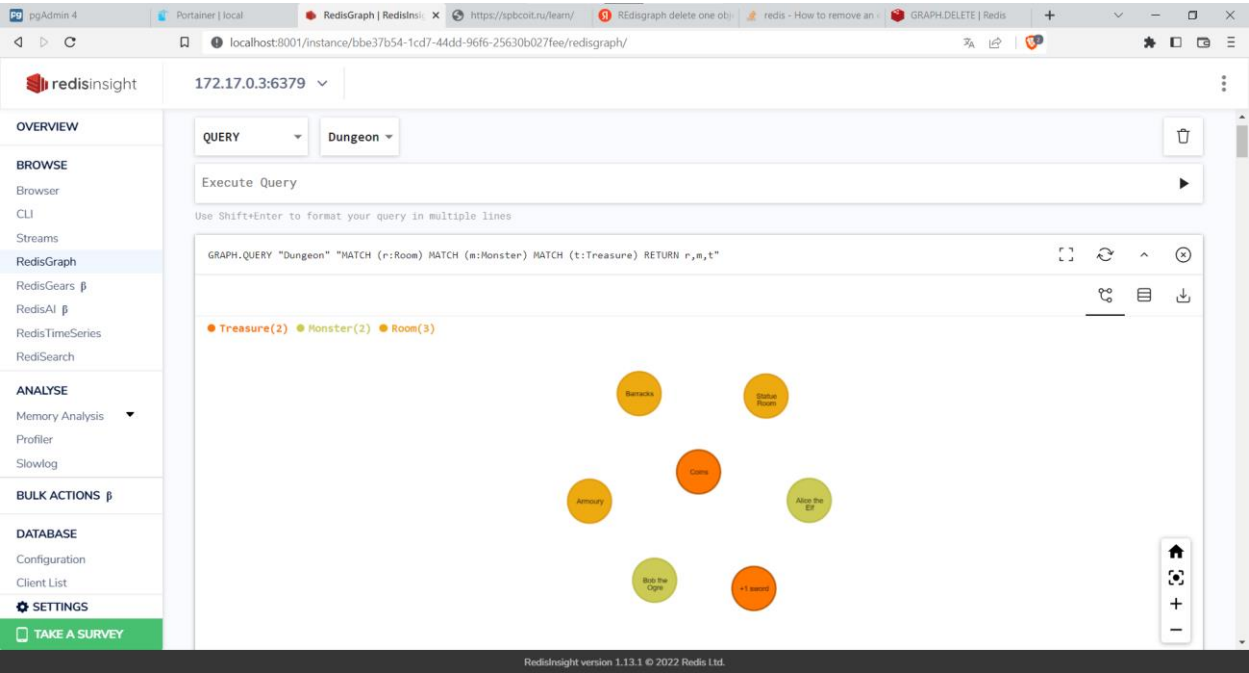
Labels added	Nodes created	Properties set	Cached execution	internal execution time
1	2	6	0	0.769761

At the bottom of the interface, it says 'Redisinsight version 1.13.1 © 2022 Redis Ltd.'

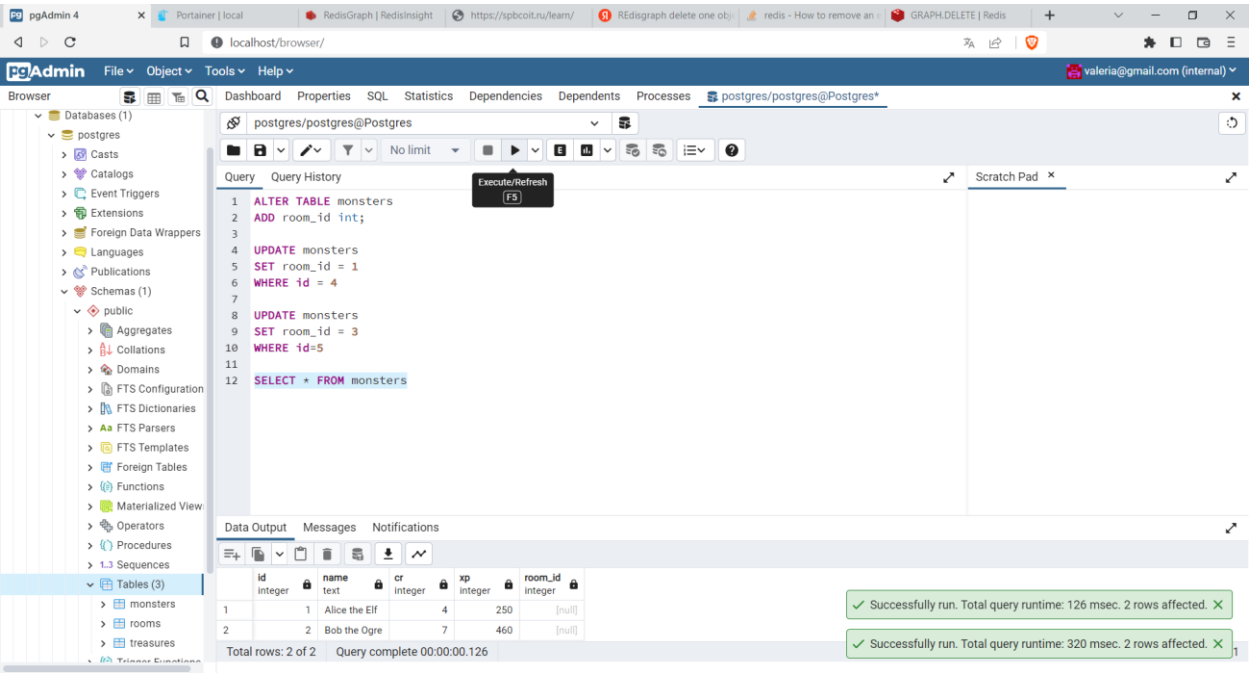
Проверка созданных объектов Treasure

The screenshot shows the RedisInsight web interface with the same sidebar as the previous image. In the main panel, the 'QUERY' tab is active, showing a text input area with the query: `GRAPH.QUERY "Dungeon" "MATCH (t:Treasure) RETURN t"`. Below the input, the results are displayed as `Treasure(2)` and a graph visualization. The graph shows two orange circular nodes: one labeled 'Coins' and another labeled '+1 sword'. On the right side of the graph, there is a vertical toolbar with icons for home, zoom in, zoom out, and reset.

Проверка всех созданных объектов



Обновление таблицы monsters



Обновление таблицы Treasures

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, with 'Databases (1)' expanded to show 'postgres'. Under 'postgres', 'Schemas (1)' is expanded to show 'public'. Under 'public', 'Tables (3)' is expanded to show 'monsters', 'rooms', and 'treasures'. The 'treasures' table is selected. The main pane shows a SQL query:

```
1 ALTER TABLE treasures
2 ADD room_id int;
3
4 UPDATE treasures
5 SET room_id = 2
6 WHERE id = 6;
7
8 UPDATE treasures
9 SET room_id = 3
10 WHERE id=7;
11
12 SELECT * FROM treasures;
```

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

id	name	gp	room_id
1	+1 sword	250	[null]
2	coins	460	[null]

Total rows: 2 of 2 Query complete 00:00:00.174

Successfully run. Total query runtime: 174 msec. 2 rows affected.

Создание связей в бд

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure, with 'Databases (1)' expanded to show 'postgres'. Under 'postgres', 'Schemas (1)' is expanded to show 'public'. Under 'public', 'Tables (3)' is expanded to show 'monsters', 'rooms', and 'treasures'. The 'rooms' table is selected. The main pane shows a SQL query:

```
1 ALTER TABLE rooms
2 ADD CONSTRAINT pk_rooms PRIMARY KEY (id);
3
4 ALTER TABLE treasures
5 ADD CONSTRAINT fk_treasures_rooms FOREIGN KEY (room_id) REFERENCES rooms(id);
6
7 ALTER TABLE monsters
8 ADD CONSTRAINT fk_monsters_rooms FOREIGN KEY (room_id) REFERENCES rooms(id);
```

The 'Messages' tab shows the result of the query:

ALTER TABLE

Query returned successfully in 84 msec.

Total rows: 2 of 2 Query complete 00:00:00.084

Ln 8, Col 78

Создание связи между объектами

redisinsight

172.17.0.3:6379

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Dungeon

Execute Query

GRAPH.QUERY "Dungeon" "MATCH (r:Room {id:1}) MATCH (m:Monster {id:4}) CREATE (r)-[:CONTAINS]->(m)"

Relationships created	Cached execution	internal execution time
1	0	12.318441

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Создание связи между другими элементами

redisinsight

172.17.0.3:6379

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Database: 0

Refresh Graph List

Add Graph

Delete Graph

QUERY

Dungeon

Execute Query

GRAPH.QUERY "Dungeon" "MATCH (r:Room {id:3}) MATCH (m:Monster {id:5}) CREATE (r)-[:CONTAINS]->(m)"

Relationships created	Cached execution	internal execution time
1	1	1.678613

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Создание связи между объектами room и treasure

redisinsight

172.17.0.3:6379

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Database: 0

Refresh Graph List

Add Graph

Delete Graph

QUERY

Dungeon

Execute Query

Use Shift+Enter to format your query in multiple lines

GRAPH_QUERY "Dungeon" "MATCH (r:Room {id: 2}) MATCH (t:Treasure {id: 6}) CREATE (r)-[:CONTAINS]->(t)"

Relationships created	Cached execution	internal execution time
1	0	2.03966

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Проверка связей

redisinsight

172.17.0.3:6379

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TAKE A SURVEY

Execute Query

Use Shift+Enter to format your query in multiple lines

GRAPH_QUERY "Dungeon" "MATCH (r:Room) MATCH (m:Monster) MATCH (t:Treasure) RETURN r,m,t"

Treasure(2) Monster(2) Room(3)

→ CONTAINS(4)

```
graph TD; T1((Treasure id: 6)) -- CONTAINS --> R1((Room id: 2)); R1 -- CONTAINS --> M1((Monster id: 10));
```

Treasure id: 6 gp: 10 name: "+1 sword"

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