ahLogo

Description automatically generated

**Final Project Deliverable: DVD Rental System**

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**Requirements**

Our database stores all the information regarding a DVD rental store. The requirements are stated below.

* Each **Category** has a name, a unique ID, and the last date when it has been updated.
* **Film Category** contains a distinctive ID, category ID, and the last date when it has been updated.
* **Film** includes a unique ID, the length of the film, the rental rate and duration of the rental, a distinctive language ID, the date when the film was released, a small description and special features, the rating, title of the film, the replacement cost, and the last date when it has been updated.
* **Language** holds a unique ID, name, and the last date when it has been updated.
* **Film Actors** include a unique film ID as well as an actor ID, and the last date when it has been updated.
* **Actors** has information about the actor. It holds a unique actor ID, the first and last name of the actor, and the last date when it has been updated.
* Each **Inventory** contains a distinctive film ID, store ID, inventory ID, and the last date when it has been updated.
* **Rental** includes a unique rental ID, inventory ID, customer ID, staff ID, along with the return date, rental date, and the last date when it has been updated.
* Every **Payment** has a payment date, a customer ID, payment ID, staff ID, rental ID, and the amount to be paid.
* Each **Customer** contains unique ID, their first name, last name, email, store number they visit, the day they came for the first time, last time they visited and their activeness.
* Every **Staff** has a unique ID, a username and password, an email, a first and last name, picture, a unique store ID, and address ID, along with its active status, and the last date when it has been updated.
* **Store** has its own store number, its address Id, when it was last updated and it’s manager staff Id.
* **Address** contains a unique address Id with city number, it’s postal code, last update date, district, phone and address of all customers, staff, and stores.
* **City** holds its unique ID, city name, city Id and last update.
* **Country** has a name, a unique ID, and the last date when it has been updated.

**ERD**

Diagram, engineering drawing

Description automatically generated

**Relational Model**

**Category**

|  |  |  |
| --- | --- | --- |
| Category\_ID | Name | Last\_update |

**Film\_Category**

|  |  |  |
| --- | --- | --- |
| Category\_ID | Film\_ID | Last\_update |

**Film**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Film\_ID | Length | Rental\_rate | Rental\_duration | Language\_ID | Release\_date |
| Description | Rating | Special\_features | Title | Last\_Update | Replacement\_cost |

**Language**

|  |  |  |
| --- | --- | --- |
| Language\_ID | Name | Last\_Update |

**Film\_Actor**

|  |  |  |
| --- | --- | --- |
| Film\_ID | Actor\_ID | Last\_update |

**Actor**

|  |  |  |  |
| --- | --- | --- | --- |
| Actor\_ID | FirstName | Second Name | Last\_Update |

**Inventory**

|  |  |  |  |
| --- | --- | --- | --- |
| Film\_ID | Last\_update | Store\_ID | Inventory\_ID |

**Rental**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Rental\_ID | Inventory\_ID | Customer\_ID | Staff\_ID | Rental\_Date | Last\_Update |

**Payment**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Payment\_ID | Rental\_ID | Staff\_ID | Customer\_ID | Payment\_date | Amount |

**Customer**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Customer\_ID | Store\_ID | Address\_ID | FirstName | LastName | Email | Create\_Date | Active | Last\_update |

**Staff**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Staff\_ID | Last\_update | Username | Password | Email | FirstName |
| LastName | Active | Picture | Store\_ID | Address\_ID |

**Address**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Address\_ID | City\_ID | Address | Phone | District | Postal\_code | Last\_update |

**Store**

|  |  |  |  |
| --- | --- | --- | --- |
| Store\_ID | Address\_ID | Manager\_staff\_ID | Last\_update |

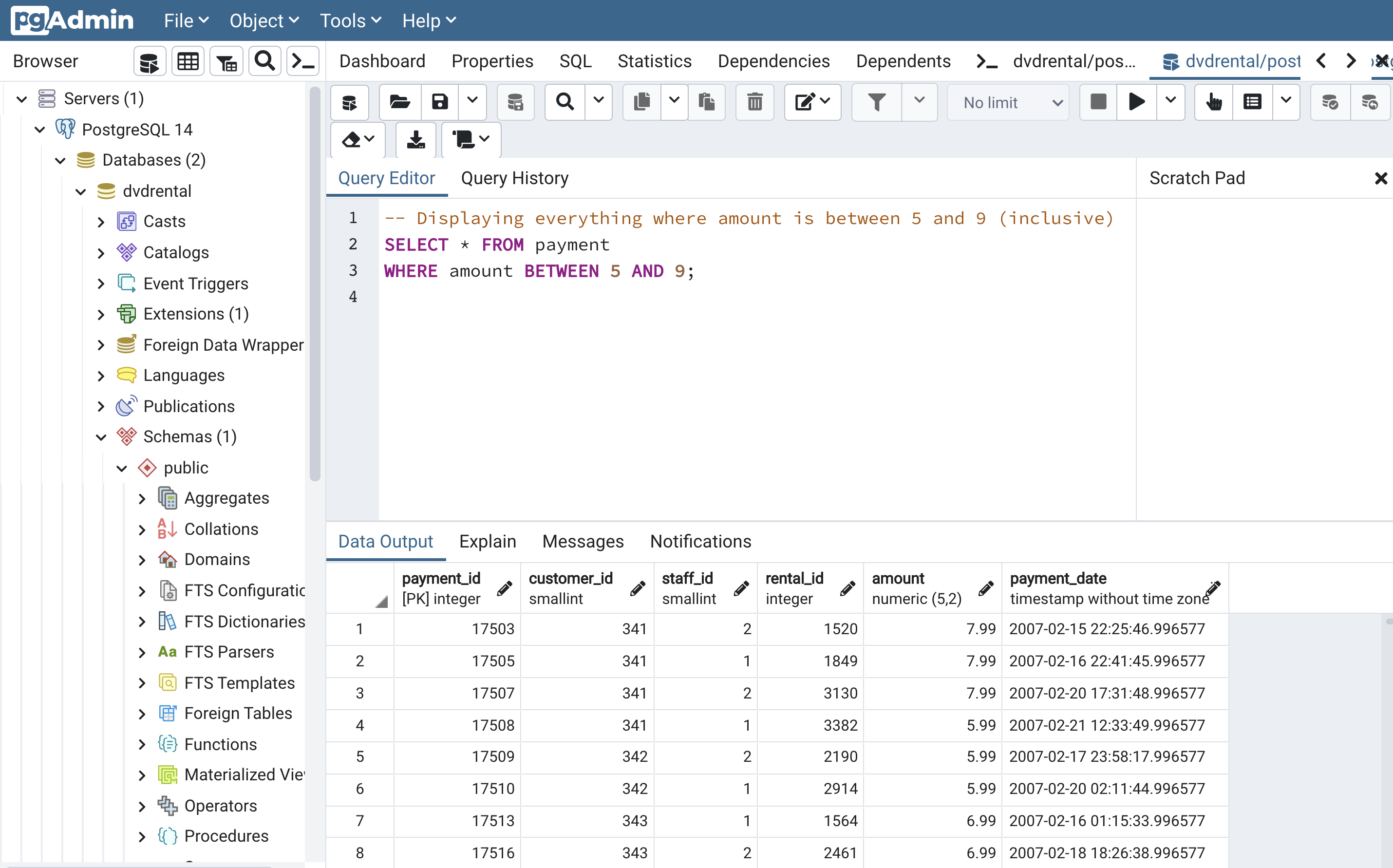
**City**

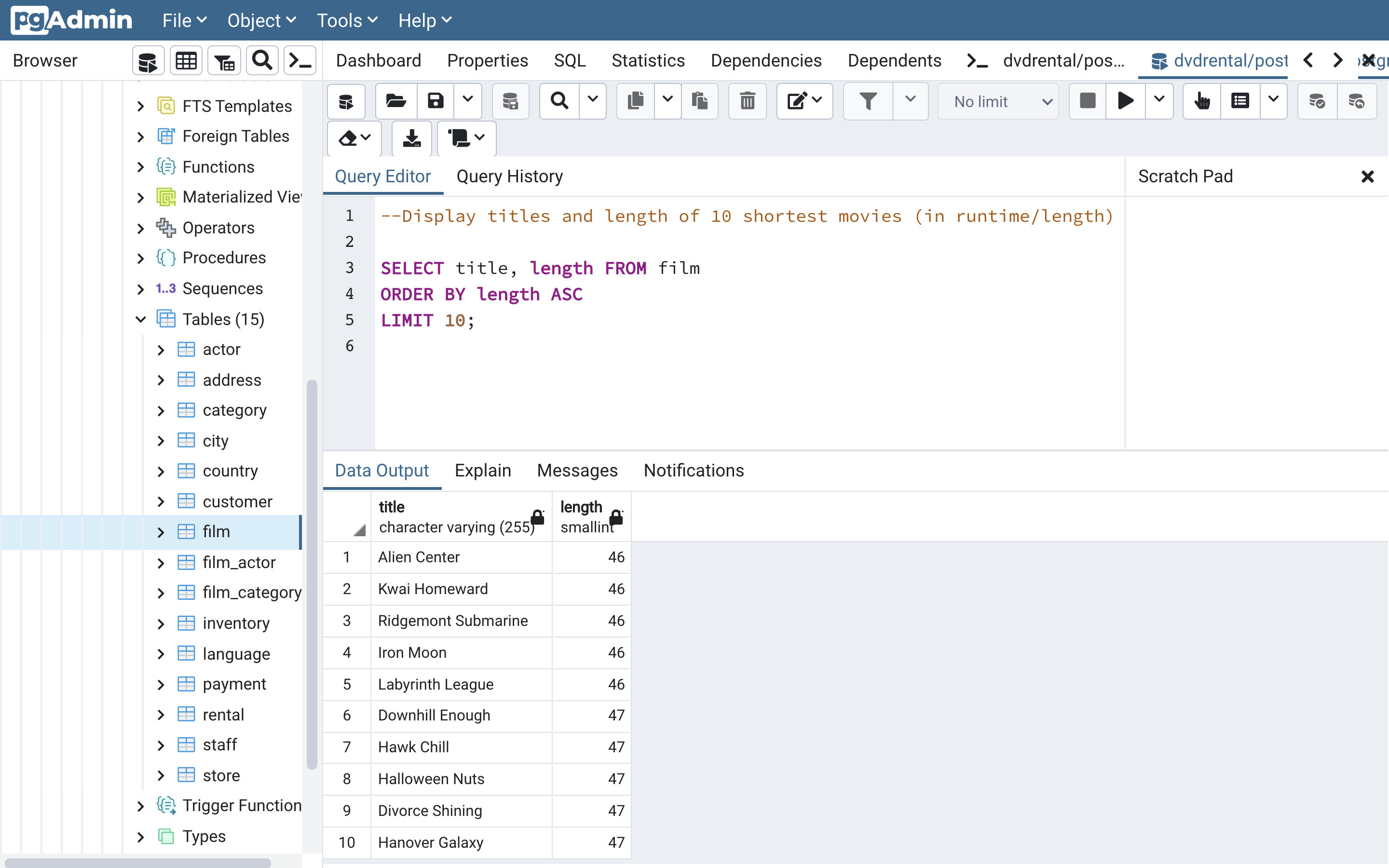
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| --- | --- | --- | --- |
| City\_ID | Country\_ID | City | Last\_update |

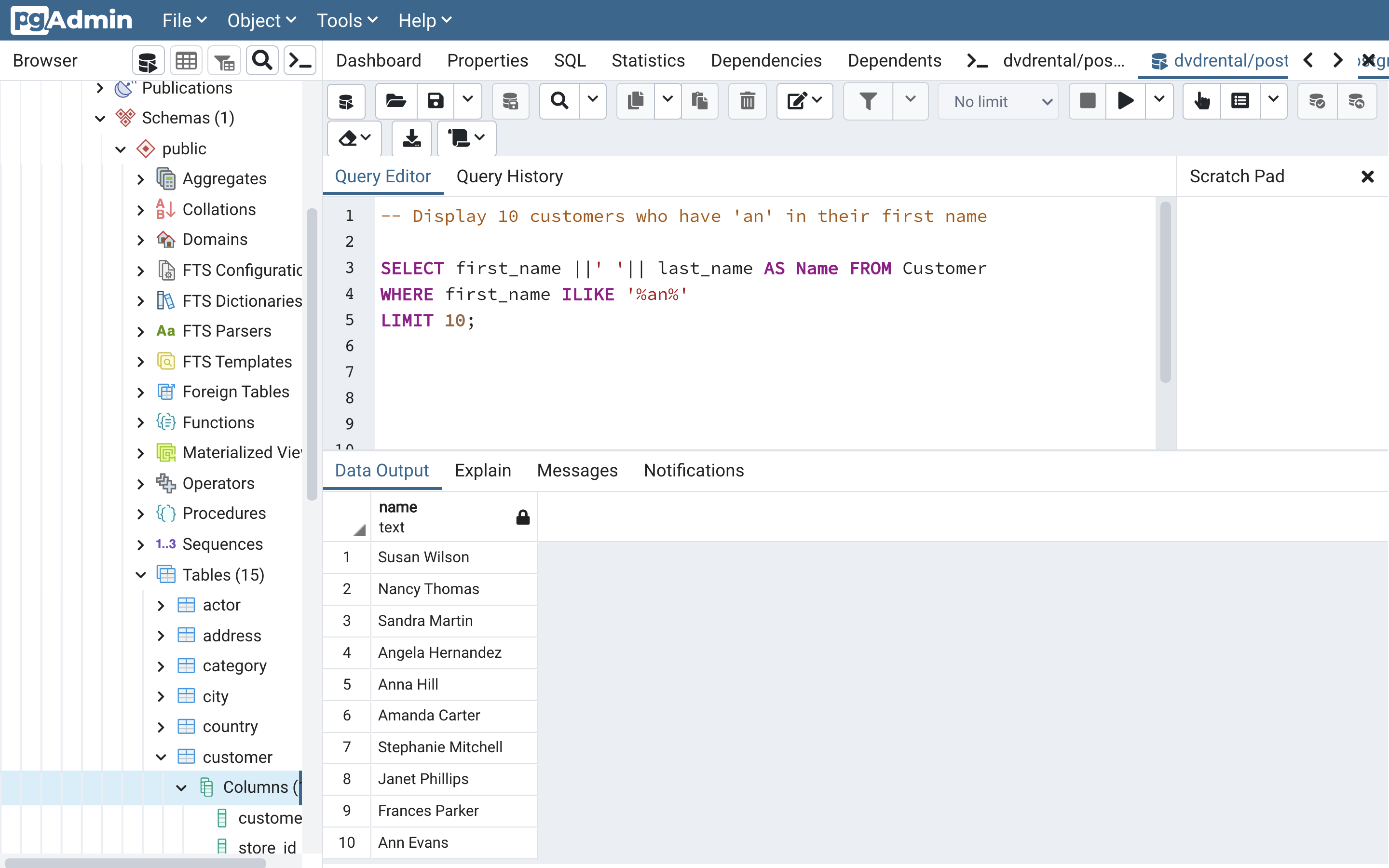
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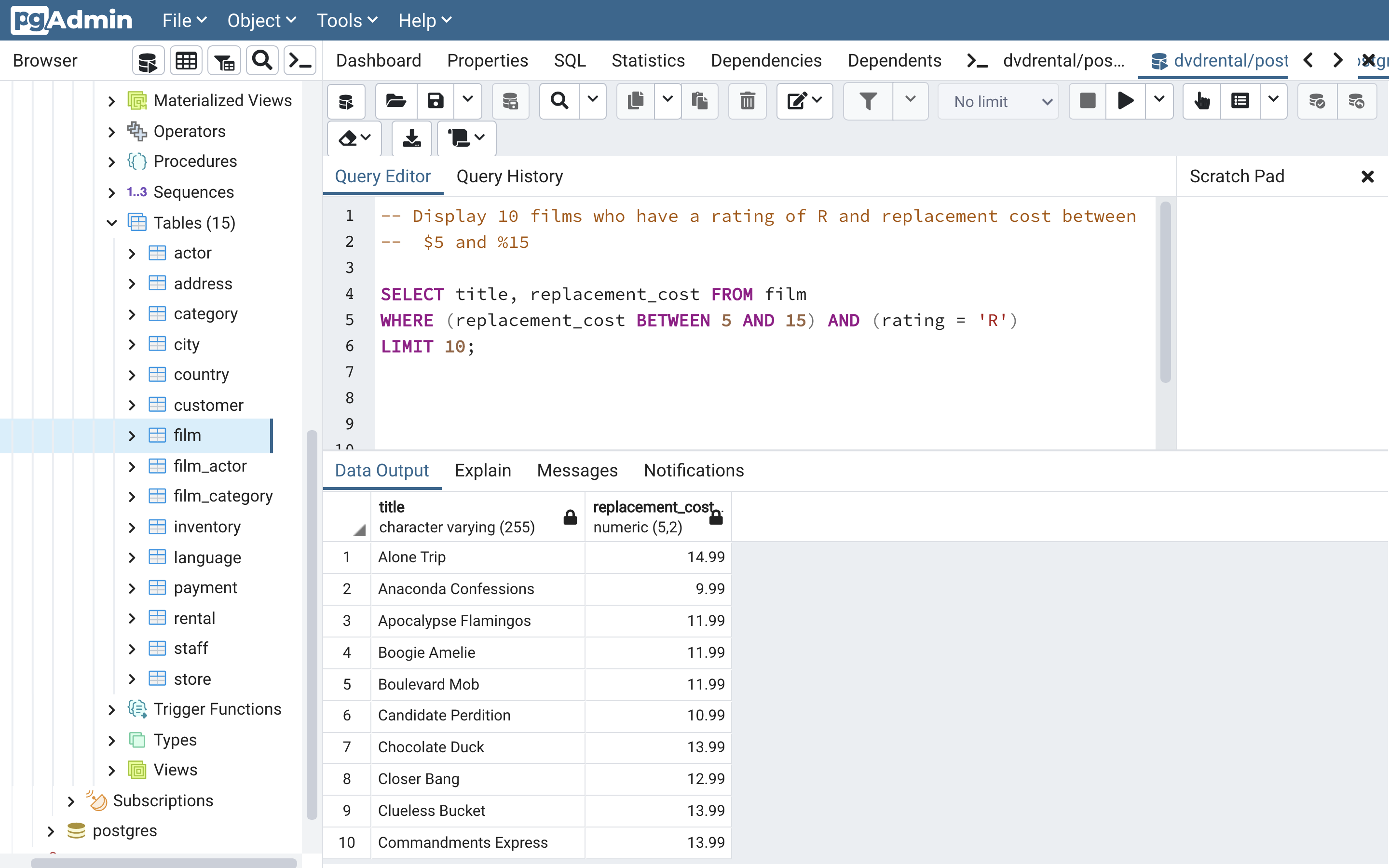
|  |  |  |
| --- | --- | --- |
| Country\_ID | Country Name | Last\_update |

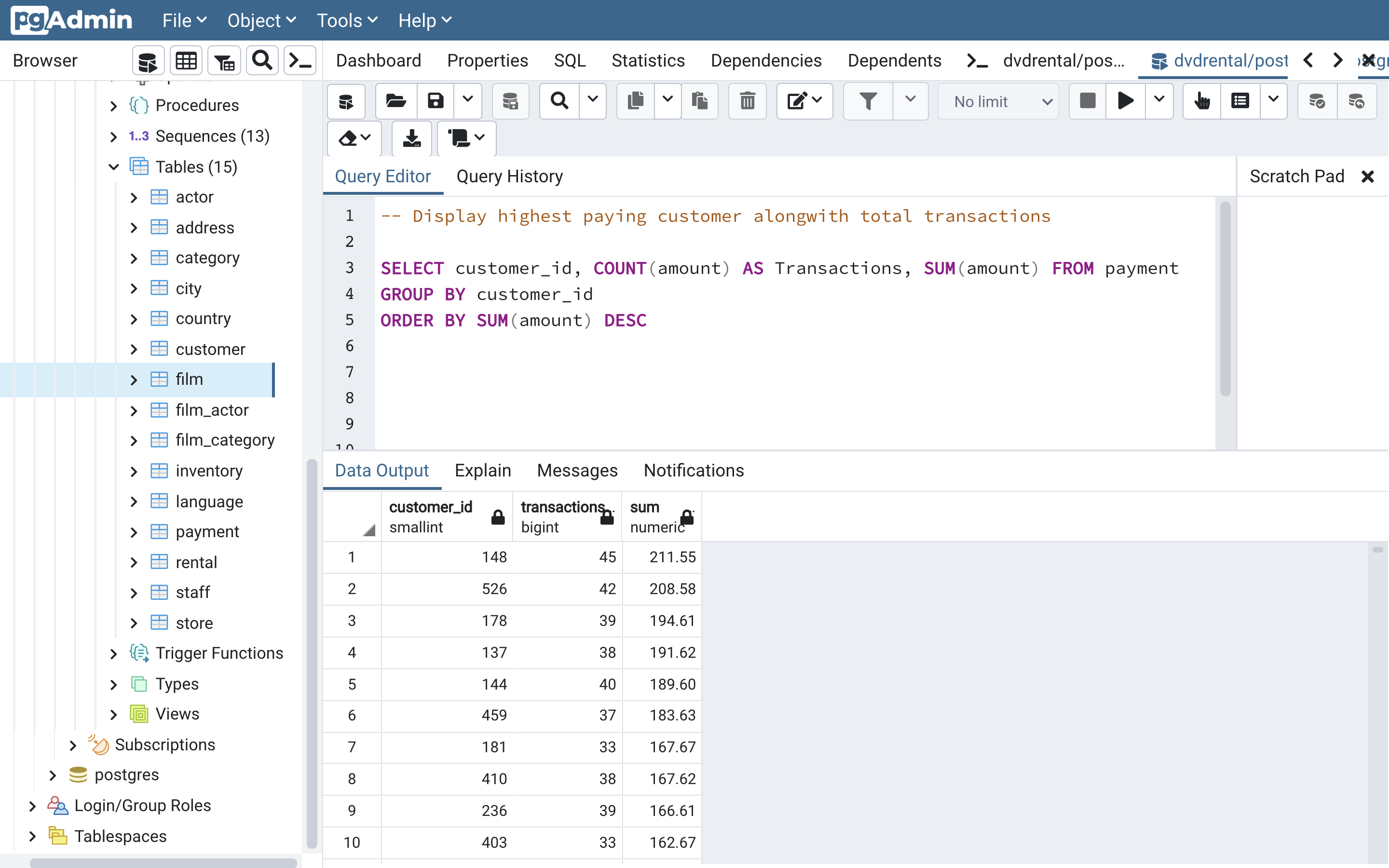
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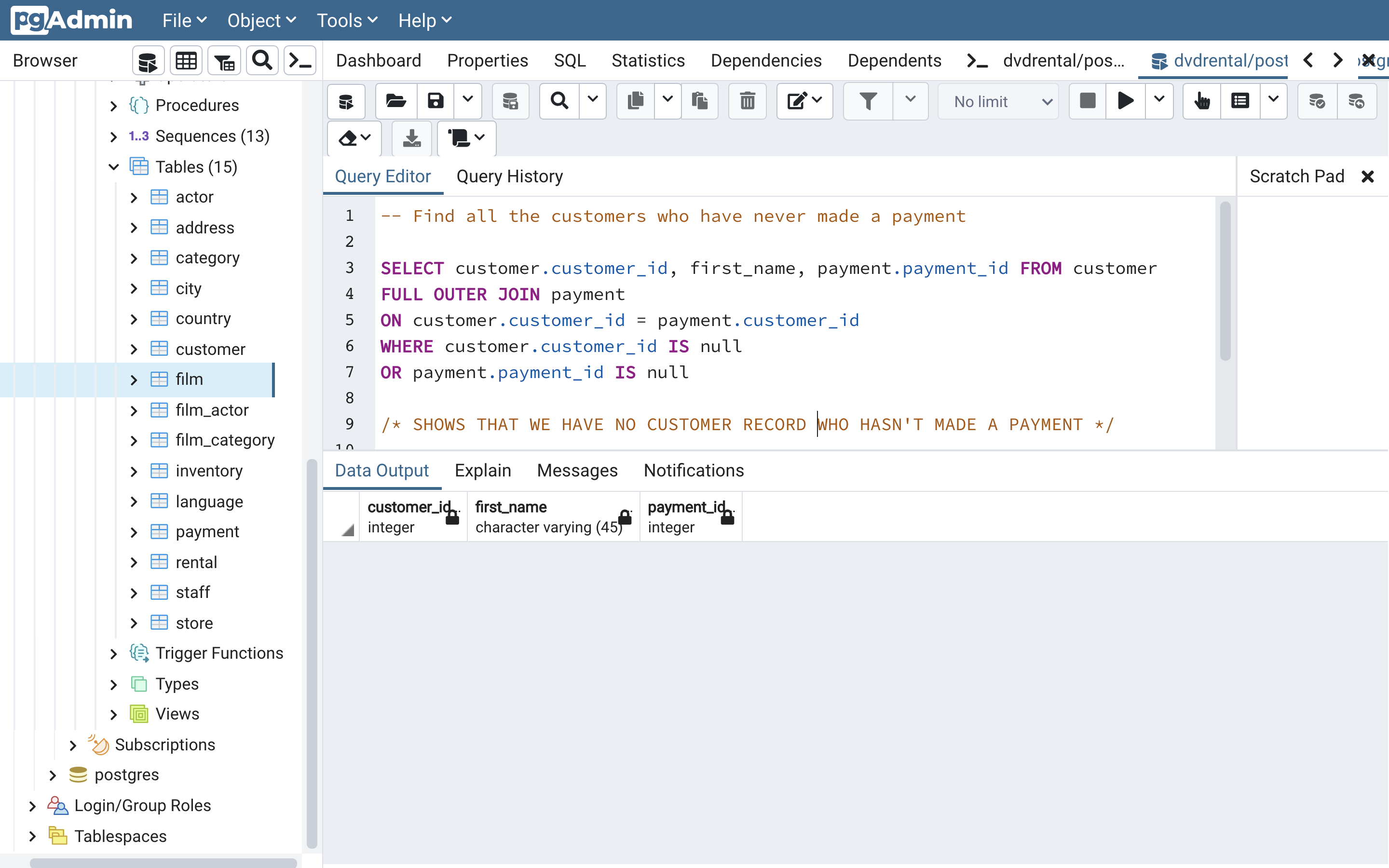
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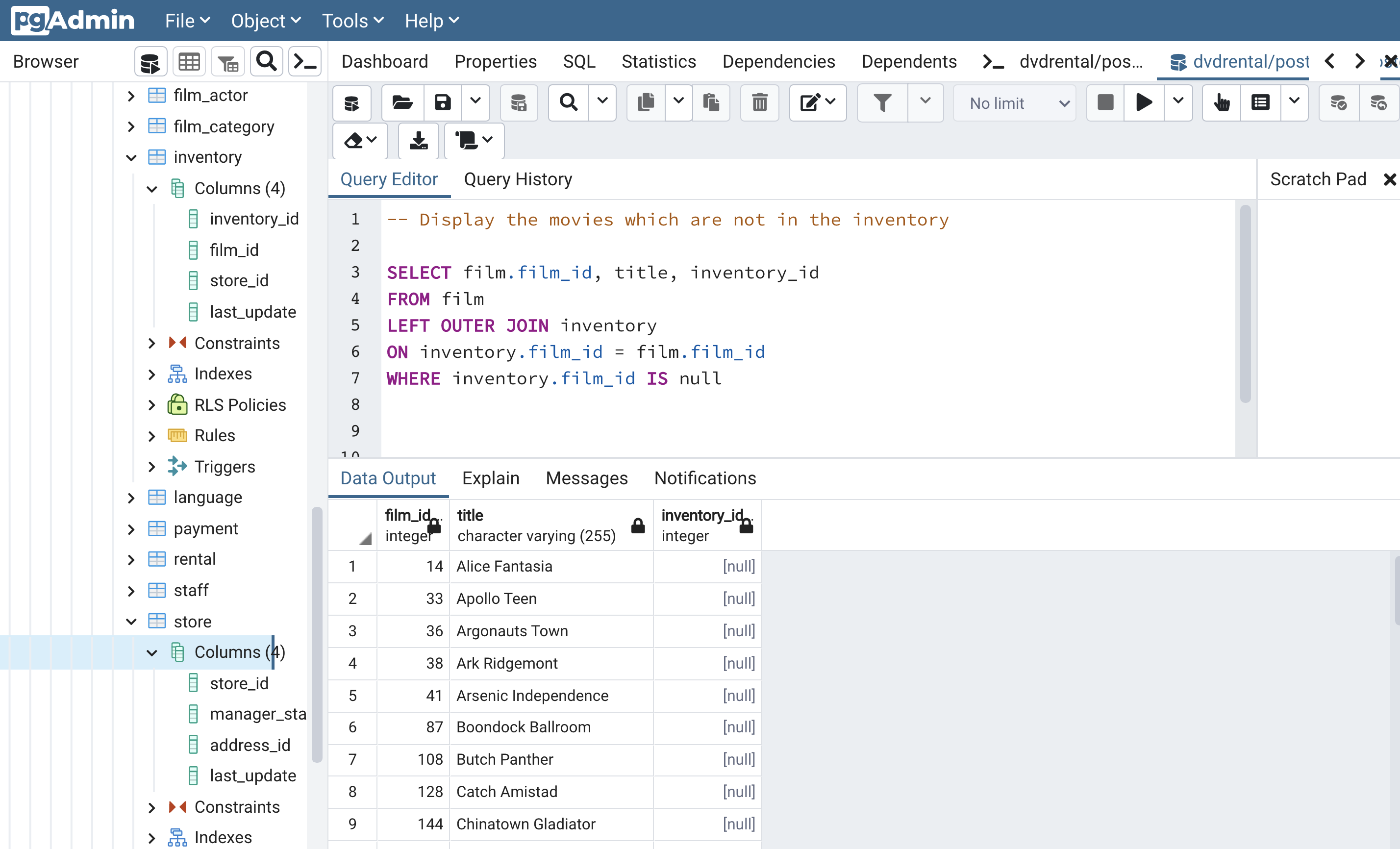
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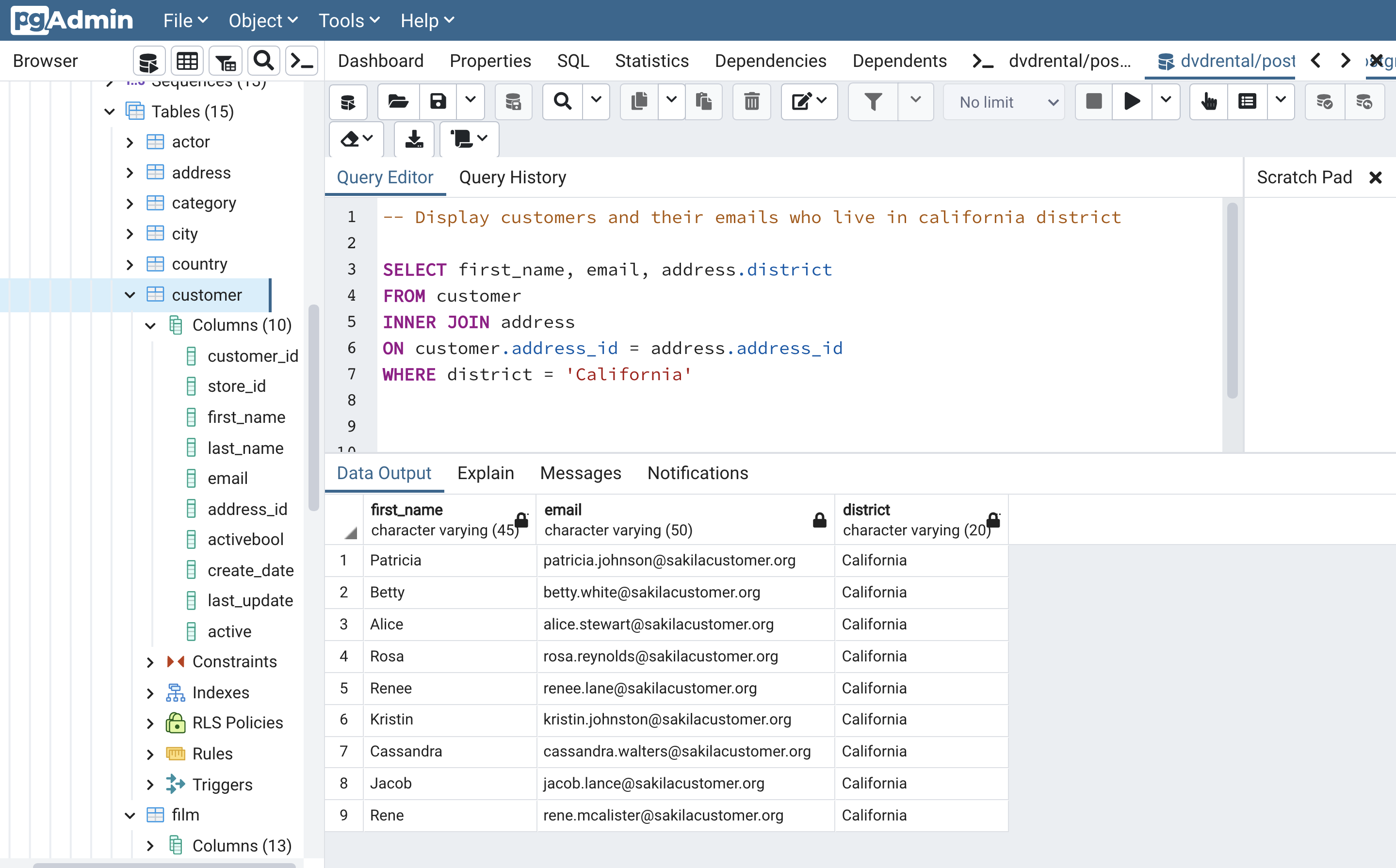
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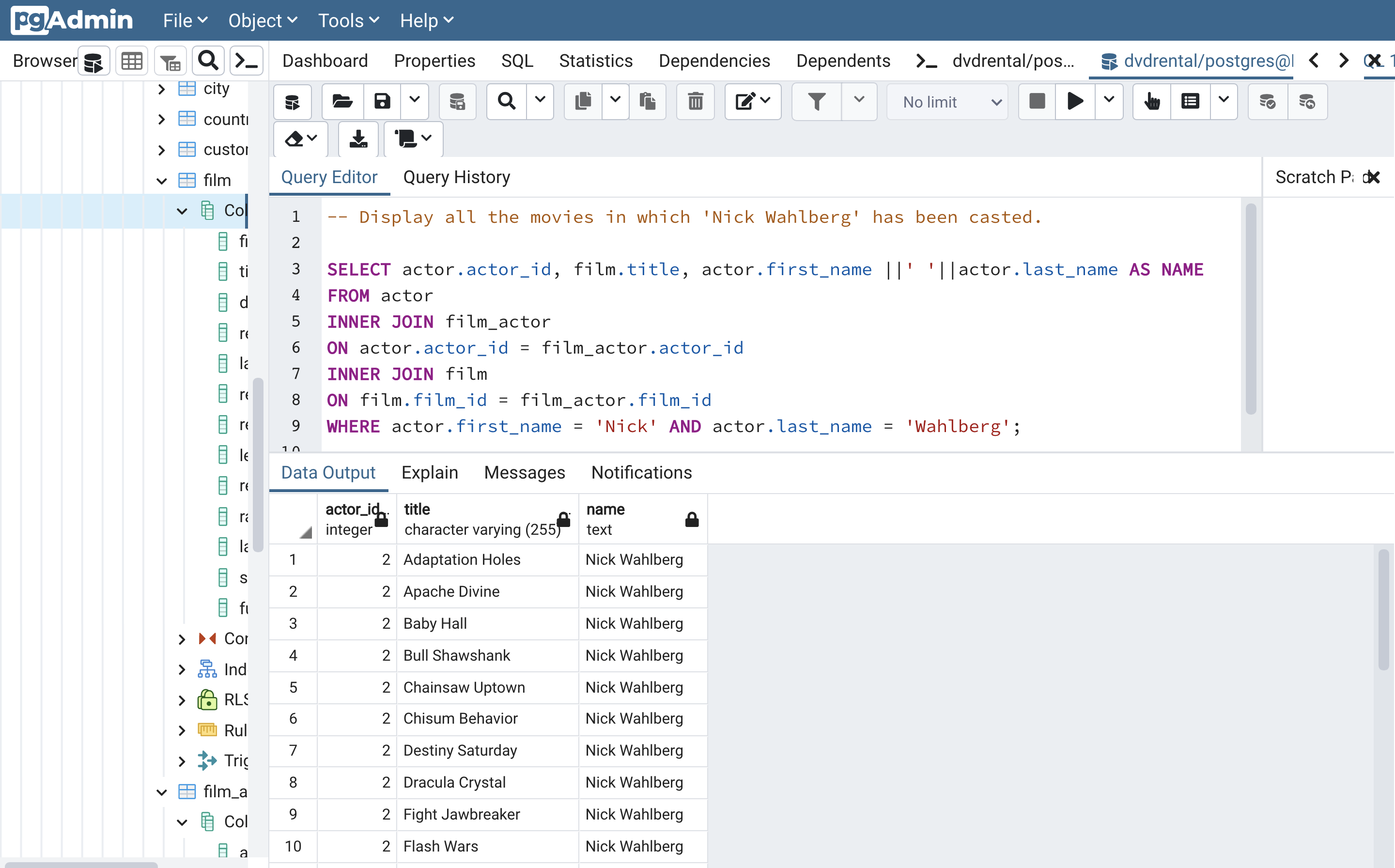
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