

7_4 LAB

Time: 2 Hours

1. Create a User Define Function to get the total amount of money a customer has spent on rentals. The user define function will be called `customer_spend` and will take a `customer_id` as input. It will return the sum of all payments in the payments table for that customer ID.
2. Create a stored procedure that will update a customer's last name. The procedure will be called `update_customer_lastname` and will take a `customer_id` and new lastname as input. Create the procedure, execute it, and then check the customer table to verify the update worked.
3. Create a stored procedure that gets all films by their category. The procedure will be called `get_films_by_category` and it will take text as input such as 'action' or 'drama'. It should return the film title, description, release year, length, rental rate, rental duration, and the category name of all films in that category.



The screenshot shows a database query execution window. The command bar contains the text: `EXEC get_films_by_category 'Action'`. Below the command bar, there are tabs for "Results" and "Messages". The "Results" tab is active, displaying a table with 7 rows and 8 columns. The columns are: title, description, release_year, length, rental_rate, rental_duration, and name. The data is as follows:

	title	description	release_year	length	rental_rate	rental_duration	name
1	easy gladiator	A Fateful Story of a Monkey And a Girl who must Over...	2006	148	4.99	5	Action
2	amadeus holy	A Emotional Display of a Pioneer And a Technical Writ...	2006	113	0.99	6	Action
3	american circus	A Insightful Drama of a Girl And a Astronaut who must ...	2006	129	4.99	3	Action
4	antitrust tomatoes	A Fateful Yam of a Womanizer And a Feminist who mu...	2006	168	2.99	5	Action
5	entrapment satisfaction	A Thoughtful Panorama of a Hunter And a Teacher wh...	2006	176	0.99	5	Action
6	excitement eve	A Brilliant Documentary of a Monkey And a Car who m...	2006	51	0.99	3	Action
7	ark ridgemont	A Beautiful Yam of a Pioneer And a Monkey who must ...	2006	68	0.99	6	Action

4. Let's switch it up and write some procedures for the CHINOOK database, to get a feel for using a different set of data. Using CHINOOK, create a stored procedure that gets the sum total of all invoices by customer. The procedure should be called `get_invoice_totals_by_customer` and take in a `customerID` from the Chinook database as input. It should return the customer name and total of all of their invoices. Test the procedure by checking the invoice amounts for customers with ID 2 and again with ID 26

5. Get a procedure called `get_tracks_by_genre`. The procedure should accept a string of text as input for the genre name, and return a list of song titles, their price, and the name of the genre.

```
106 --Test Procedure
107 EXEC get_tracks_by_genre 'World'
108 EXEC get_tracks_by_genre 'Jazz'
```

Name	UnitPrice	name
Pura Elegancia	0.99	World
Choramingando	0.99	World
Por Merecer	0.99	World
No Futuro	0.99	World
Voce Inteira	0.99	World
Cuando A Noite Vai Chegando	0.99	World

6. Alter the stored procedure `get_tracks_by_genre` to return the tracks in alphabetical order, A-Z

7. In the database of your choice, create your own stored procedure. Think about the procedure you want to create by answering these questions.

- What data do I want my procedure to return?
- What does my procedure need to accept as input?
- What variables and parameters does my procedure need to function?
- Should my procedure make any updates to the database?