Window Functions Bonus Assignment

Due December 14 by 12:00 PM

1) List each film_id and film_title with the total number of times each film was rented and show its overall rank among all films by total rentals. (dvdrental database).

```
select film_id, title, count(rental_id) as total_rentals,
rank() over(order by count(rental_id) desc)
from film
left join inventory
using(film_id)
left join rental
using(inventory_id)
group by film_id, title;
```

2) Display employee_id, department_id, and salary, along with their rank in that department based on salary (highest salary gets rank 1) (HR Database).

```
select employee_id, department_id, salary,
rank() over(partition by department_id order by salary desc)
from employees;
```

3) For each employee, display employee_id, first_name, last_name, their department, their salary, and the average salary of their department (Do Not use Group By)(HR Database)

```
with round as(
select employee_id, first_name, last_name, department_name, salary,
avg(salary) over(partition by e.department_id) as average_salary
from employees e
join departments d
using(department_id)
order by employee_id)
select employee_id, first_name, last_name, department_name, salary,
round(average_salary,2) as avg_salary
from round;
```

4) Show each employee's ID, salary, and their rank based on wages within their department (HR database). Assign the same rank to employees with equal salaries.

```
select employee_id, salary, department_id,
dense_rank() over(partition by department_id order by salary desc)
from employees;
```

5) List each product, its name, price, and assign a rank based on the unit price (Northwind Database).

```
select product_id, product_name, unit_price,
rank() over(order by unit_price desc)
from products;
```