SQL Assignment

Consider a meal delivery company which operates in multiple cities. They have various fulfillment centers in these cities for dispatching meal orders to their customers.

They have the following data with them from all the fulfillment centers:

- Historical data of demand for a product-center combination (Weeks: 1 to 145)
- Product(Meal) features such as category, sub-category, current price and discount
- Information for fulfillment center like center area, city information etc.

Data Dictionary

1. Weekly Demand data (train.csv): Contains the historical demand data for all centers.

Variable	Definition
id	Unique ID
week	Week No
center_id	Unique ID for fulfillment center
meal_id	Unique ID for Meal
checkout_price	Final price including discount, taxes & delivery charges
base_price	Base price of the meal
emailer_for_promotion	Emailer sent for promotion of meal
homepage_featured	Meal featured at homepage
num_orders	(Target) Orders Count

2. fulfilment_center_info.csv: Contains information for each fulfilment center

Variable	Definition
center_id	Unique ID for fulfillment center
city_code	Unique code for city
region_code	Unique code for region
center_type	Anonymized center type
op_area	Area of operation (in km^2)

3. meal_info.csv: Contains information for each meal being served

Variable	Definition
meal_id	Unique ID for the meal
category	Type of meal (beverages/snacks/soups….)
cuisine	Meal cuisine (Indian/Italian/…)

Assignment Questions

1. What are the distinct number of meal categories and cuisines?
2. Which center_id has the highest num_orders?
3. What is the top selling cuisine at the center_id that had the highest num_orders?
4. What is the average op_area per center_type?
5. Which center_type had the highest revenue? (Revenue is total sum of checkout_price*num_orders)
6. Which is the top ordered cuisine in terms of num_orders?
7. What are the num_orders per cuisine per week?
8. Which center_id gave the highest number of discounts? (Discount is considered when checkout_price is less than base_price)