

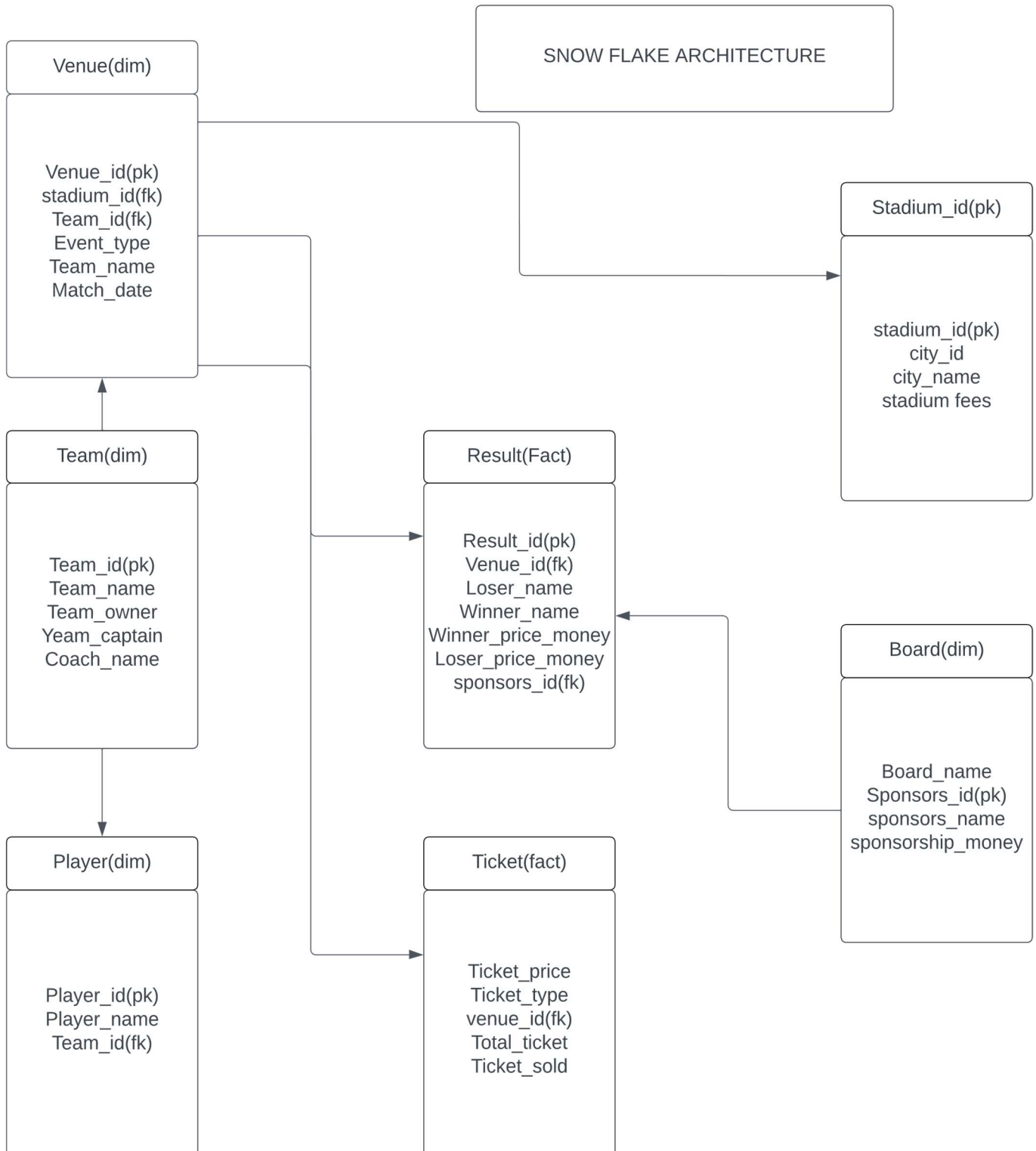
Design Data Warehouses For Given Below Products:

Note : While designing any Data Warehouse make sure to cover given below points.

- a. Design Fact & Dimension tables
- b. Create meaningful Primary & Foreign keys
- c. Try to follow Star/Snowflake Schema Design
- d. Try to write few SQL queries to generate insightful business metrics (This is the critical point because you need to understand the Data & Business both)

1. Design a Data Warehouse for IPL Cricket Tournament (Asked in Flipkart Interview for Senior Data Engineer role)
2. Design a Data Warehouse for Food delivery app like Swiggy, Zomato (Asked in Grab for Data Engineer role)
3. Design a Data Warehouse for cab ride service like Uber, Lyft (Asked in Google for Data Engineer role)
4. Design a Data Warehouse for Restaurant table booking app like Dineout (Asked in McKinsey for Consultant Data Engineer role)
5. Design a Data Warehouse for Covid Vaccination Application (Asked in Livsapce for Data Engineer role)

1. Design a Data Warehouse for IPL Cricket Tournament ?



Snowflake Schema Design

1) Select winner team name of ipl final ?

Ans: select winner name from venue,result where event_type='Final'.

2) Select winner team prize money in ipl final?

ANS: select Winner_prize_money from from venue left join result
venue.venue_id = result. venue_id o where Winner_name= (select
winner_name from venue where event_type='Final')

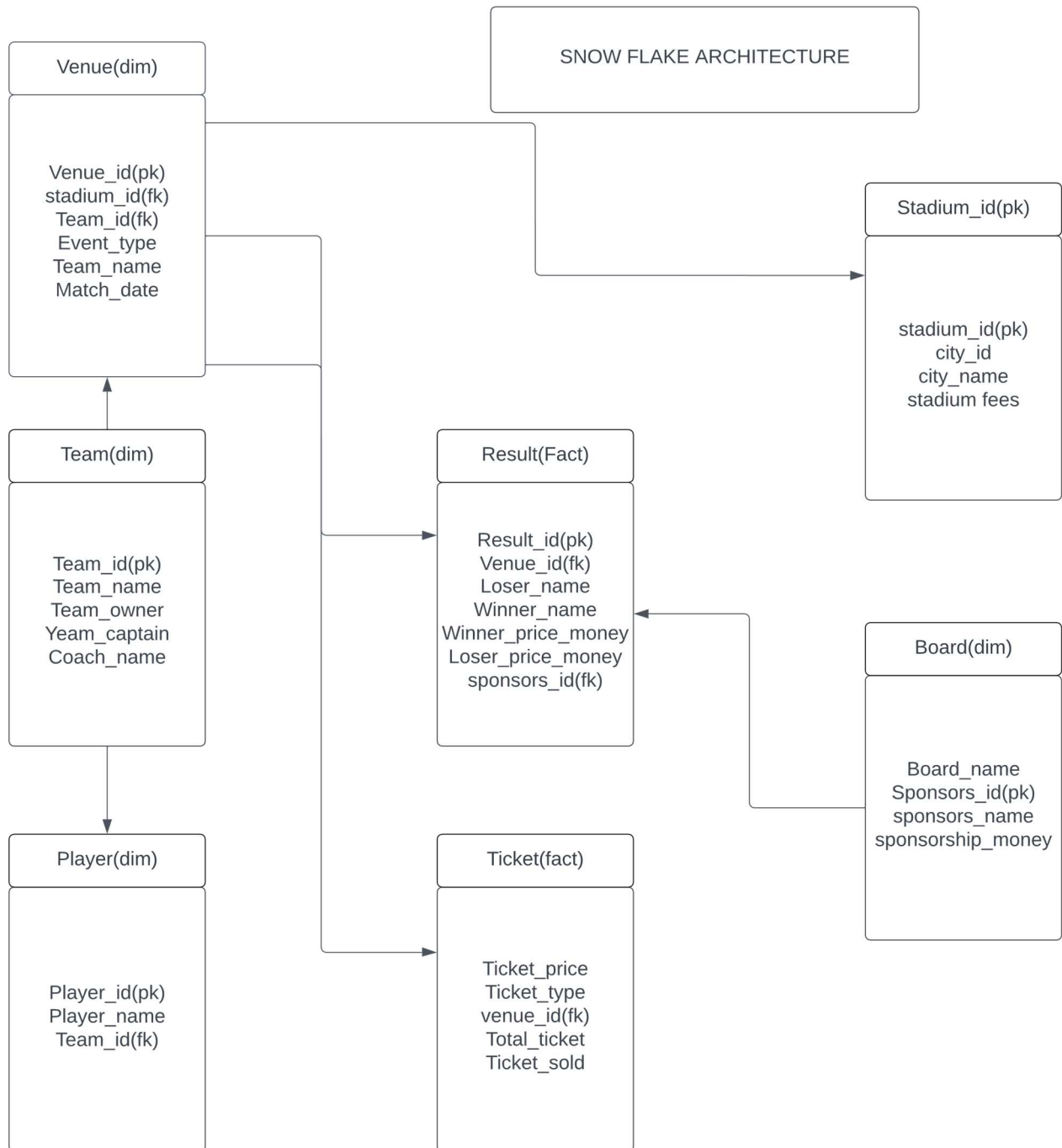
3)select avg ticket price of ipl?

Ans: select avg(Ticket_price) from Ticket.

4)Count number sponsorship in ipl ?

Ans: select count(Sponsors_id) from Board.

2.Design a Data Warehouse for Food delivery app like Swiggy,



snowflake architecture

1)average salary of food delivery boy ?

Ans:select avg(salary) from Delivery

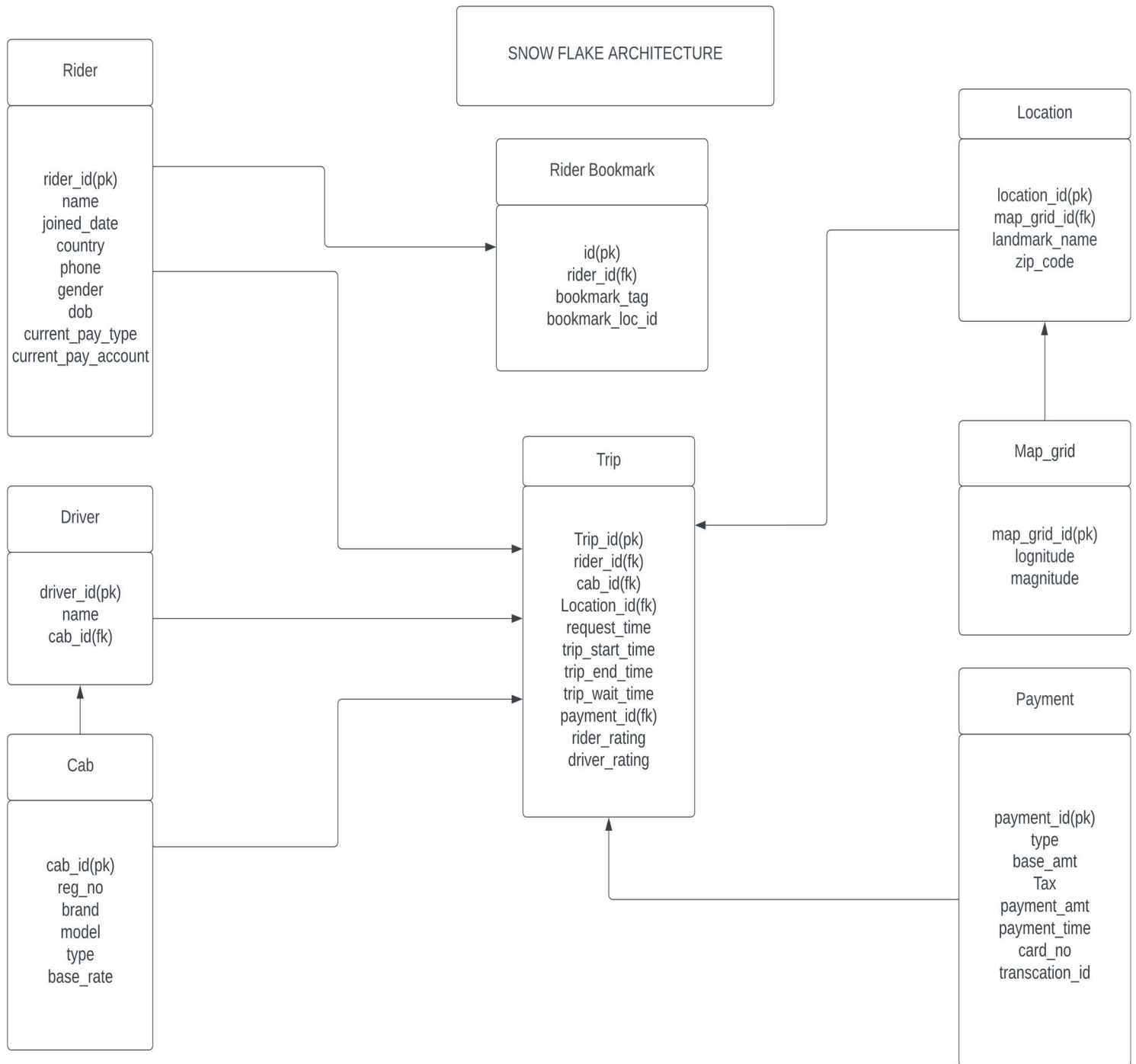
2)Number of orders in a date?

Ans:select count(order_id) over(partition by date) as cnt from order

3)total cost of order?

Ans: select sum(Food_cost) as total from order

3. Design a Data Warehouse for cab ride service like Uber, Lyft ?



Snowflake_architecture.

1) What is average rating of rider in uber ?

Ans) `select avg(rider_rating) from Trip .`

2) what is average ride time in uber ?

Ans) `select avg(start_time -end_time) from Trip.`

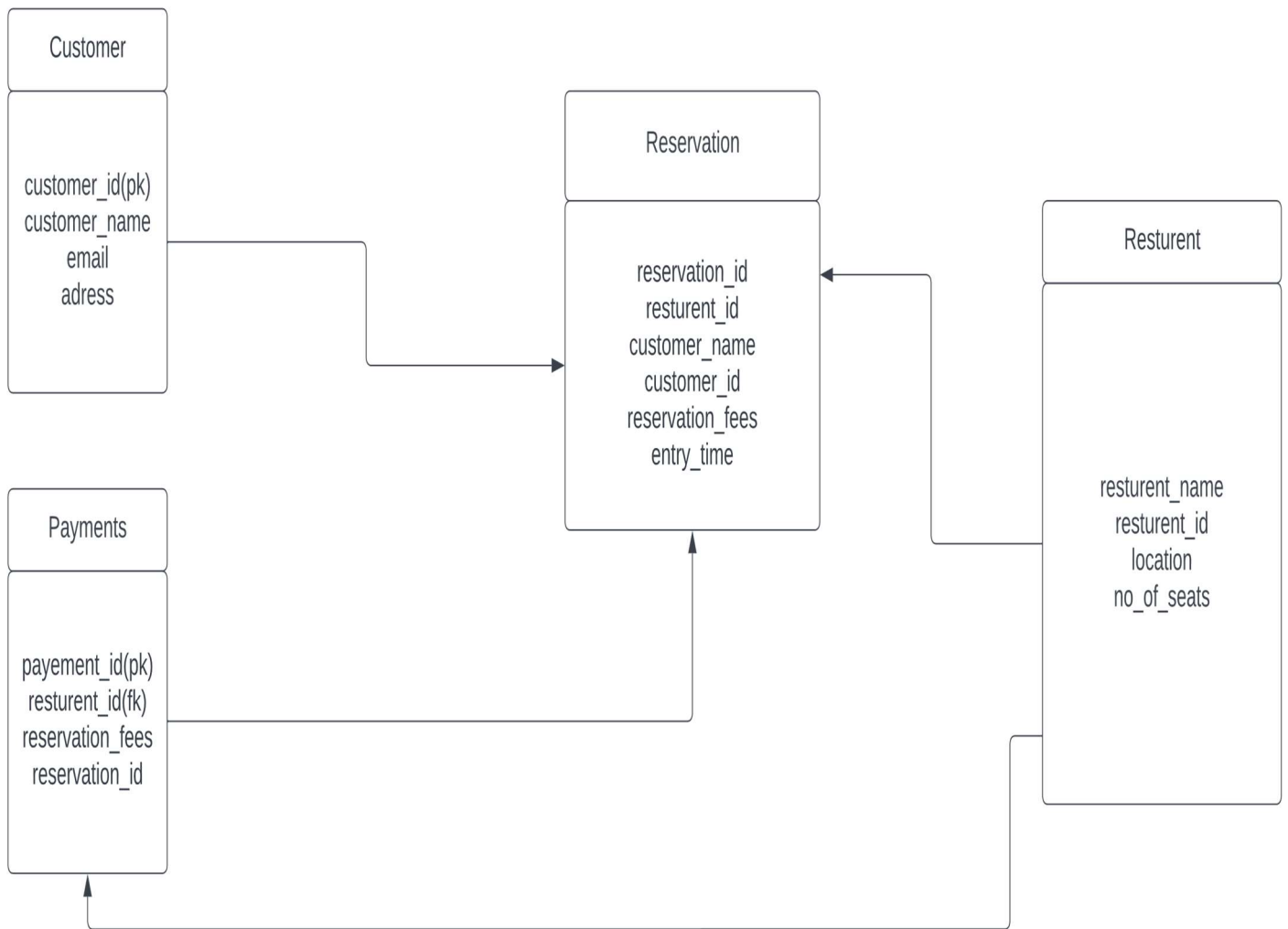
3) which is maximum type of transaction in uber?

Ans) with cte as(

`Select sum(case when type="online" then 1 else 0 end) as
online, sum(case when type="cash" then 1 else 0 end) as cash
from Payment)`

`select if online > cash then "online" else cash from cte.`

4. Design a Data Warehouse for Restaurent table booking app like Dineout ?



Snowflake architecture

1)total reservation fess collect by a particular restaurant in 2022?

Ans: select sum(Reservation_fess) from reservation join restaurant on reservation. Restaurant_id = restaurant. Restaurant_id where year(entry_time)=2022 group by Restaurant_id .

2)count total user in dineout app ?

Ans: select count(customer_id) from customer.

5 . Design a Data Warehouse for Covid Vaccination Application ?



Snowflake architecture

i) Count total number of vaccination?

Ans: select count(Vaccin_id) from Vaccination_slo.

ii) which hospital provides most vaccin jab?

Ans: select hospital_name, hospital_id, max(Vaccin_id)
as cnt from hospital group by hospital_name, hospital_id
order by cnt asc limit 1