SQL Project Queries

The company wants to Calculate number of flights each period of the day.

Create period wise data, how many flights departure at morning, afternoon, evening, and night.

```
select
     departure_airport,
     count(case
               when extract (HOUR from scheduled_departure) < 12 then 1
           end) as morning_flights,
     count(case
               when extract (HOUR from scheduled_departure) between 12 and 15 then 1
           end) as afternoon_flights,
     count(case
               when extract (HOUR from scheduled_departure) between 16 and 19 then 1
           end) as evening_flights,
     count(case
               when extract (HOUR from scheduled_departure) >= 20 then 1
           end) as night_flights
From FLIGHTS
group by 1
order by departure_airport asc
```

Total Scheduled flying time for booking references

```
select
 b.book_ref,
 sum(f.scheduled_arrival - f.scheduled_departure) as total_flying_time
from bookings b
join tickets t
on b.book_ref = t.book_ref
join ticket_flights tf
on t.ticket_no=tf.ticket_no
join flights f
on tf.flight_id=f.flight_id
group by b.book_ref
having count(f.flight_id) >1
order by b.book_ref
```

Compare Total_order_quantity and Total_return_quantity product wise

```sql
select
    s.product_id,
    sum(s.orderquantity) as Total_Order_Quantity,
    coalesce(sum(r.returnquantity),0) as Total_Return_Quantity
    from SALES s
    left join RETURNS r
    on s.product_id = r.product_id
    group by s.product_id
    order by Total_Order_Quantity desc, s.product_id asc
```

Total quantities sold by category name

```sql
select
categoryname,
sum(case when extract(year from s.orderdate)=2020 then s.orderquantity else null end) as total_quantity_2020,
sum(case when extract(year from s.orderdate)=2021 then s.orderquantity else null end) as total_quantity_2021,
sum(case when extract(year from s.orderdate)=2022 then s.orderquantity else null end) as total_quantity_2022
from categories c
left join subcategories sc
on c.category_id=sc.category_id
left join products p
on c.category_id=sc.category_id
left join sales s
on p.product_id=s.product_id
and extract(year from s.orderdate) between 2020 and 2022
group by c.categoryname
order by 1
```