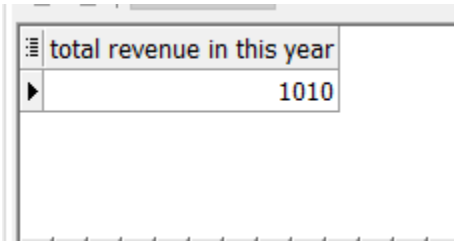
1) **What is the total revenue for the current year**

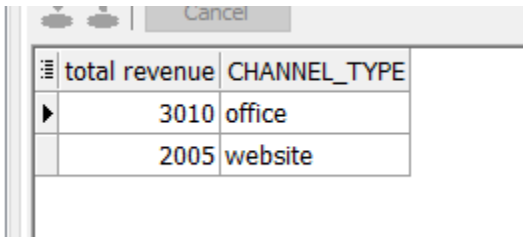
```
select sum (revenue )  as "total revenue in this year"

from reservation_fact , date_dimension

where

date_dimension.DATE_KEY = reservation_fact.DATE_KEY

and

date_dimension.date_year= to_number (TO_CHAR(sysdate,'YYYY'));
```



total revenue in this year
1010

2) **What is the revenue gained from each Booking Channels?**

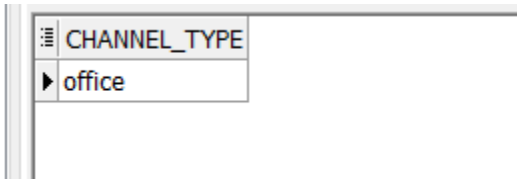
```
select  sum(reservation_fact.revenue) as "total revenue"  ,
channel_dimension.channel_type
from reservation_fact , channel_dimension
where
channel_dimension.channel_key = reservation_fact.channel_key
group by   channel_type
```



total revenue	CHANNEL_TYPE
3010	office
2005	website

3) **What is the best booking channel used for reservations?**

```
select channel_dimension.channel_type
from reservation_fact , channel_dimension
where
channel_dimension.channel_key = reservation_fact.channel_key
group by   channel_type
having count(channel_type) = (
select max (count(channel_type))
from reservation_fact , channel_dimension
where
channel_dimension.channel_key = reservation_fact.channel_key
group by   channel_type
)
```



CHANNEL_TYPE
office

4) **What flights do the company's frequent flyers take?**

```
SELECT

   f.departure_airport,

   f.arrival_airport,

   flying.is_transit,

   COUNT(*) AS "count"

FROM Fact_flying fying

INNER JOIN Dim_Flight f ON flying.flight_key = f.flight_key

INNER JOIN Dim_passengers p ON flying.passenger_key = p.passenger_key
```

```
WHERE
   p.frequent_flyer_id IS NOT NULL
GROUP BY
   f.departure_airport, f.arrival_airport, flying.is_transit
ORDER BY
   count DESC;
```

5) What fare basis do they pay?

```
SELECT
   fb.code,
   COUNT(*) AS “count”
FROM Fact_flying fying
INNER JOIN Dim_Fare_Basis fb ON flying.fare_basis_key = fb.fare_basis_key
INNER JOIN Dim_passengers p ON flying.passenger_key = p.passenger_key
WHERE
   p.frequent_flyer_id IS NOT NULL
GROUP BY
   fb.code
ORDER BY
   count DESC;
```

6) how long their overnight stays are?

```
SELECT
   MIN(ov.duration) AS “min”,
   AVG(ov.duration) AS “avg”,
   MAX(ov.duration) AS “max”
FROM Fact_Overnight_Layover AS ov
INNER JOIN Dim_Passenger p ON ov.passenger_key = p.passenger_key
WHERE
   p.frequent_flyer_id IS NOT NULL;
```

7) NUMBER AND TYPE OF INTERACTION PER FLIGHT

```
SELECT FACT.FLIGHT_KEY, INTERACTION_TYPE, count(*) as
NUM_OF_INTERACTIONS
FROM customer_care FACT,
        Interaction C,
       date_dimension D,
        flight_dimension F,
        passenger_dimension P
WHERE FACT.DATE_KEY = d.DATE_KEY
        AND FACT.INTERACTION_ID = C.INTERACTION_ID
        AND FACT.PASSENGER_key= P.PASSENGER_key
        AND FACT.FLIGHT_KEY = F.FLIGHT_KEY
        group by FACT.FLIGHT_KEY, INTERACTION_TYPE;
```

FLIGHT_KEY	INTERACTION_TYPE	NUM_OF_INTERACTIONS
7890	WITHIN	1
3245	BEFORE	3
5678	AFTER	2

8) AVERAGE PROBLEM SEVERITY PER FLIGHT

```
SELECT FACT.FLIGHT_KEY, AVG(PROBLEM_SEVERITY)
FROM customer_care FACT,
        Interaction C,
        date_dimension D,
        flight_dimension F,
        passenger_dimension P
WHERE   FACT.DATE_KEY = D.DATE_KEY
        AND FACT. INTERACTION_ID = C. INTERACTION_ID
        AND FACT. PASSENGER_key = P. PASSENGER_key
        AND FACT.FLIGHT_KEY = F. FLIGHT_KEY
    group by FACT.FLIGHT_KEY;
```

FLIGHT_KEY	AVG(PROBLEM_SEVERITY)
9620	2
8185	4