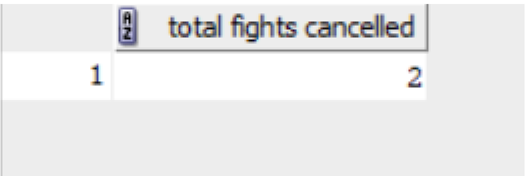
1) Total Number of flights in certain year

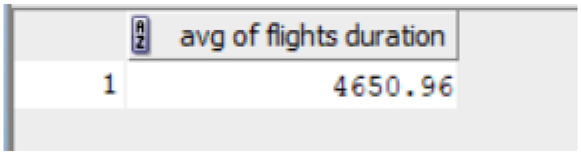
```
SELECT COUNT(Total_flight_completed) as "total fights completedS"
FROM flight_activity_fact ff
join d_date d
on ff.Date_key = d.Date_id
where d.year = '&year';
```



	total fights cancelled
1	2

2) Average duration of delayed flights

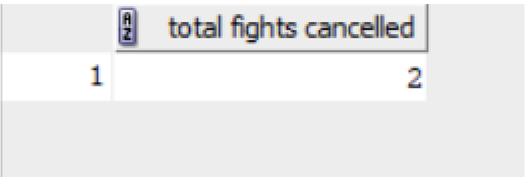
```
SELECT round(AVG(ff.Flight_duration),2) as "avg of flights duration"
FROM flight_activity_fact ff
JOIN flight f
on ff.flight_key = f.flight_key
WHERE f.Arrival_Time > f.scheduled_arrival_time;
```



	avg of flights duration
1	4650.96

3) Number of canceled flights in certain Month

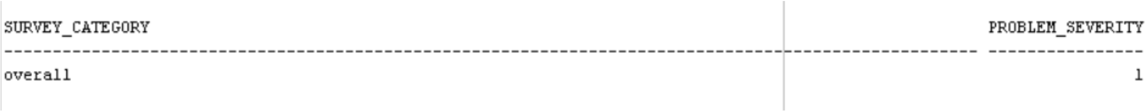
```
SELECT COUNT(Total_flight_cancelled) as "total fights cancelled"
FROM flight_activity_fact ff
join d_date d
on ff.date_key = d.date_id
where d.Month_num = '&Month';
```



	total fights cancelled
1	2

4) Which category has the most Problem_severity ?

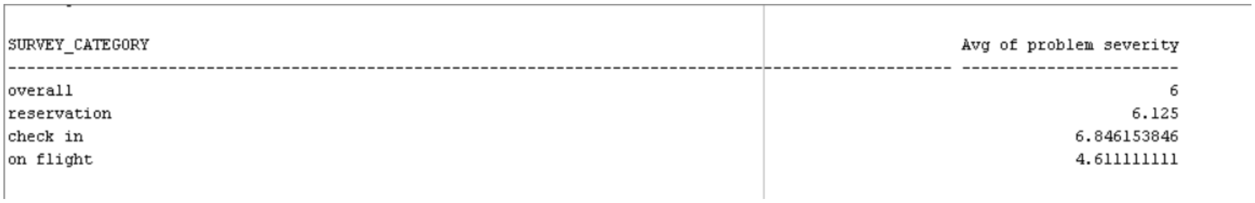
```
select Survey_Category, Problem_severity
from survey s, customer_care_fact c
where s.Survey_Key = c.Survey_Key AND Problem_severity <2;
```



```
SURVEY_CATEGORY                                                                                       PROBLEM_SEVERITY
----------------------------------------------------------------------------------------------------- ----------------
overall                                                                                                              1
```

5) avg of problem severity over all categories

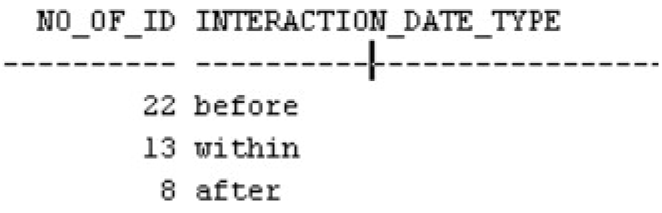
```
select s.Survey_Category, avg(c.Problem_severity) as "Avg of problem
severity"
from survey s, customer_care_fact c
where s.survey_key = c.survey_key
group by s.Survey_Category;
```



```
SURVEY_CATEGORY                                                                                       Avg of problem severity
----------------------------------------------------------------------------------------------------- -----------------------
overall                                                                                                                     6
reservation                                                                                                             6.125
check in                                                                                                          6.846153846
on flight                                                                                                         4.611111111
```

6) In which time the most surveys come ?

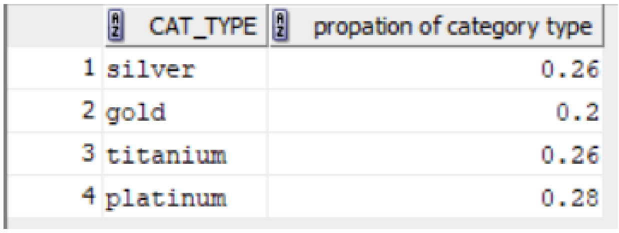
```
select count(Survey_ID) AS NO_OF_ID, Interaction_Date_Type
from Survey s, customer_care_fact c, Interaction I
where i.interaction_key = c.interaction_key and s.survey_key=
c.survey_key
and Interaction_Date_Type is not null
group by interaction_date_type
order by 1 desc;
```



```
  NO_OF_ID INTERACTION_DATE_TYPE
---------- -------------------------
        22 before
        13 within
         8 after
```

7) getting the proportion of each frequent flyer category

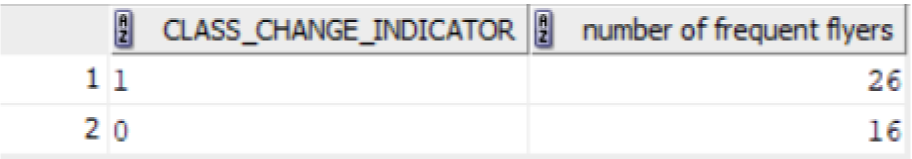
```
select cat_type, round(count(cat_type) /
(select count(p.frequent_flyer_key)
from frequent_flyer f, passenger p, reservation_fact r
where f.frequent_flyer_key = p.frequent_flyer_key and p.passenger_key
= r.passenger_key),2)
as "propation of category type"
from reservation_fact r, passenger p,  frequent_flyer f,
frequent_flyer_cat c
where p.passenger_key = r.passenger_key and f.frequent_flyer_key =
p.frequent_flyer_key and
c.frequent_flyer_cat_key=f.frequent_flyer_cat_key
group by c.cat_type;
```



	CAT_TYPE	propation of category type
1	silver	0.26
2	gold	0.2
3	titanium	0.26
4	platinum	0.28

8) how many frequent flyer change upgrade their flights

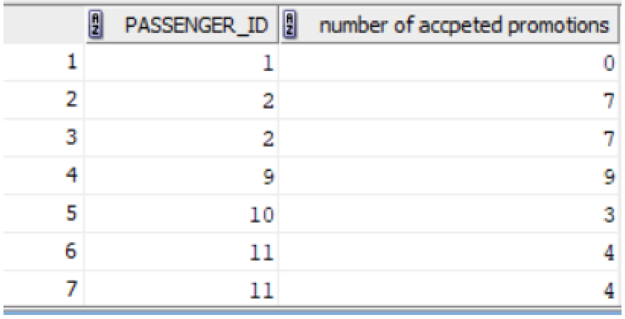
```
select class_change_indicator, count(*) as "number of frequent flyers"
from reservation_fact r, passenger p,  frequent_flyer f
where p.passenger_key = r.passenger_key and f.frequent_flyer_key =
p.frequent_flyer_key
and class_change_indicator is not null
group by r.class_change_indicator;
```



	CLASS_CHANGE_INDICATOR	number of frequent flyers
1	1	26
2	0	16

9) number of accepting promotion for each frequent flyer

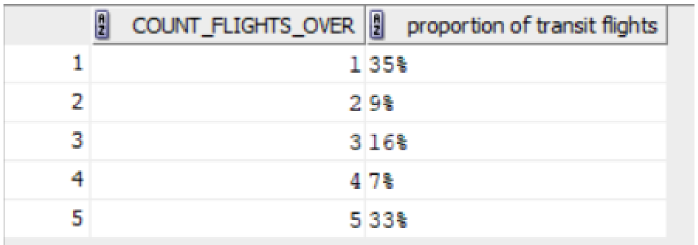
```
select p.passenger_id, f.promotion as "number of accpeted promotions"
from reservation_fact r, passenger p,  frequent_flyer f
where p.passenger_key = r.passenger_key and f.frequent_flyer_key =
p.frequent_flyer_key
and f.promotion is not null
order by 1
```



	PASSENGER_ID	number of accpeted promotions
1	1	0
2	2	7
3	2	7
4	9	9
5	10	3
6	11	4
7	11	4

10) getting the percent of each value in all flights if it is transit or one flight

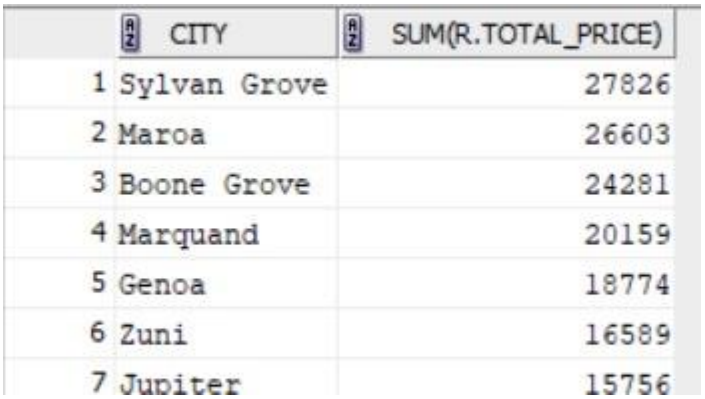
```
select count_flights_over, round(count(r.count_flights_over)/(select
count(r.count_flights_over) from reservation_fact r, passenger p,
frequent_flyer f
where p.passenger_key = r.passenger_key and f.frequent_flyer_key =
p.frequent_flyer_key
and r.count_flights_over is not null),2) * 100 || '%'
as "proportion of transit flights"
from reservation_fact r, passenger p,  frequent_flyer f
where p.passenger_key = r.passenger_key and f.frequent_flyer_key =
p.frequent_flyer_key
and r.count_flights_over is not null
group by count_flights_over
order by 1
```



	COUNT_FLIGHTS_OVER	proportion of transit flights
1	1	35%
2	2	9%
3	3	16%
4	4	7%
5	5	33%

11) total prices of reservations for each city

```
select city, sum(r.total_price)
from reservation_fact r, flight f, airport a, location l
where r.flight_key=f.flight_key and a.airport_key=f.airport_key
and l.location_key = a.location_key and l.city is not null
group by l.city
having sum(r.total_price) > 0
order by 2 desc;
```



	CITY	SUM(R.TOTAL_PRICE)
1	Sylvan Grove	27826
2	Maroa	26603
3	Boone Grove	24281
4	Marquand	20159
5	Genoa	18774
6	Zuni	16589
7	Jupiter	15756