```
create database projects;

use projects;

select * from project;

alter table project rename column `call duration in minutes` to call_duration;

select count(*) as total_record from project;

select call_timestamp, year(call_timestamp) from project;

set sql_safe_updates=0;

update project set call_timestamp=str_to_date(call_timestamp,"%m/%d/%Y");

select call_timestamp, year(call_timestamp) from project;

select * from project limit 5;

update project set csat_score=null where csat_score=0;

select distinct call_center from project;

select distinct sentiment from project;

select distinct avg(call_duration) from project;


-- total number of calls in each call centre

select  call_center,count(*) as total_num_calls from project group by
call_center;
```

```
-- find callcenter with maximum number of calls

select call_center,count(*) as total_call from project group by call_center
order by total_call desc ;


-- find total numner of call from each sentiments and -- percentage of all
calls

select sentiment,count(*)  from project group by sentiment order by 2 desc;

select sentiment,count(*)/32941*100 from project group by sentiment ;

select count(*) as total_record from project;


-- total number of call bye channel

select channel,count(*) as totalcall from project group by channel;

select channel,count(*) as totalcall,count(*)/32941*100 as percentage from
project group by channel;


-- reason data from project

-- - call for billing was about 71% where as for service outage and
payments where 14% each


select distinct reason from project;
```

```
select distinct reason,count(*) as totalbilling from project group by reason
order by totalbilling desc;

select distinct reason,count(*),round((count(*))/(select count(*) from
project)*100,1) as percentage from project group by reason;

select distinct channel,count(*),round((count(*))/(select count(*) from
project)*100,1) as percentage from project group by channel;

select call_center,count(*) as totalcall from project group by call_center
order by 2 desc;

select * from project;

select state,count(*) as top5 from project group by state order by 2 desc
limit 5;

select state, city,count(*) as top5 from project group by state,city order by
2 desc ;

select channel,min(call_duration) from project group by channel;

select sentiment,count(*) from project group by sentiment;

select customer_name,csat_score from project order by 2 desc limit 5;

select customer_name,call_duration from project order by 2 desc limit 5;

select channel, min(call_duration) as mincall, max(call_duration) as maxcall,
avg(call_duration) as maxcall from project group by channel;

select channel, min(csat_score) as mincall, max(csat_score) as maxcall,
round(avg(csat_score),2) as maxcall from project group by channel;
```

```
select sentiment, min(csat_score) as mincall, max(csat_score) as maxcall,
round(avg(csat_score),2) as avgcall from project group by sentiment;

select year(call_timestamp), count(*) from project group by
year(call_timestamp);

select year(call_timestamp),sum(call_duration) from project group by
year(call_timestamp);

alter table project add column year varchar(100);

update project set year=substring_index(call_timestamp,"-",1);

select * from project;

select year,sum(call_duration) from project group by year;
```