**Question 1:**

create table db1.login2 as

select \*,week(login\_time) as weekno,lead(login\_time) over(partition by user\_id,week(login\_time) order by login\_time) as next\_login,

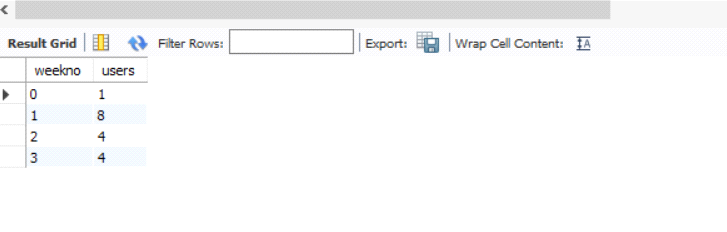
timestampdiff(minute,login\_time,lead(login\_time) over(partition by user\_id,week(login\_time) order by login\_time)) as min

from db1.login order by 1,2,3 ;

select weekno,count(user\_id) as users from (

select \*, dense\_rank() over(partition by user\_id,weekno order by login\_time) as row\_num from db1.login2) as tb3

where row\_num=1 and min>=10 and min<=360 group by 1;



**Questions 2:**

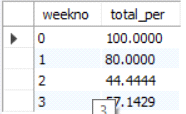
create table db1.login3 as

select \*, dense\_rank() over(partition by user\_id,weekno order by login\_time) as row\_num from db1.login2;

select \* from db1.login3;

select weekno,(sum(case when row\_num=1 and min>=10 and min<=360 then 1 else 0 end)/count(distinct user\_id))\*100 as total\_per

from db1.login3 group by 1;



**Questions 3:**

select t6.weekno,(t5.sec\_user/users)\*100 as q3\_per from

(select weekno,count(distinct user\_id) as sec\_user from (

select \* from db1.login3 where user\_id in (select user\_id from db1.login3 where row\_num=1 and min between 10 and 360)

and weekno in (select weekno from db1.login3 where row\_num=1 and min between 10 and 360)

and row\_num in (2,3,4)) as tb4 where min between 10 and 360 group by 1) as t5

join

(select weekno,count(user\_id) as users from (

select \*, dense\_rank() over(partition by user\_id,weekno order by login\_time) as row\_num from db1.login2) as tb3

where row\_num=1 and min>=10 and min<=360 group by 1) as t6 on t6.weekno=t5.weekno;

