

Day 8

Problem Statement:

Write an SQL query that reports for each install date, the number of players that installed the game on that day and the day 1 retention?

Solution Code:

```
/*using ivy_sql_internship databasse*/
use ivy_sql_internship;
/*Creating table activity*/
create table Activity (player_id int, device_id int, event_date date, games_played int);
/*inserting value in table*/
insert into Activity (player_id,device_id,event_date,games_played)
values
(1,2,"2016-03-01",5),
(1,2,"2016-03-02",6),
(2,3,"2017-06-25",1),
(3,1,"2016-03-01",0),
(3,4,"2016-07-03",5);
/*Checking the table*/
select * from Activity;
/*Write an SQL query that reports for each install date, the number of players that installed
the game on that day and the day 1 retention.*/

select a1.event_date as install_dt, count(a1.player_id) as installs, round(count(a3.player_id) /
count(a1.player_id), 2) as Day1_retention
from Activity a1 left join Activity a2
on a1.player_id = a2.player_id and a1.event_date > a2.event_date
left join Activity a3
on a1.player_id = a3.player_id and datediff(a3.event_date, a1.event_date) = 1
where a2.event_date is null
group by a1.event_date;
```

Screenshot of the Code:

MySQL Workbench

IVY Practice x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

book_database

emp_db

ipl

ivy_sql_internship

Tables

activity

country_details

customer

insurance

marks_data

Administration

Schemas

Information

Table: activity

Columns:

player_id int

device_id int

event_date date

games_played int

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Limit to 50000 rows

10 (2,3,"2017-06-25",1),

11 (3,1,"2016-03-01",0),

12 (3,4,"2016-07-03",5);

13 /*Checking the table*/

14 select * from Activity;

15 /*Write an SQL query that reports for each install date, the number of players that installed

16 the game on that day and the day 1 retention.*/

17

18 select a1.event_date as install_dt, count(a1.player_id) as installs, round(count(a3.player_id) / count(a1.player_id), 2) as Day1_retention

19 from Activity a1 left join Activity a2

20 on a1.player_id = a2.player_id and a1.event_date > a2.event_date

21 left join Activity a3

22 on a1.player_id = a3.player_id and datediff(a3.event_date, a1.event_date) = 1

23 where a2.event_date is null

24 group by a1.event_date;

Result Grid

Filter Rows:

Export

Wrap Cell Content: I A

install_dt	installs	Day1_retention
2016-03-01	2	0.50
2017-06-25	1	0.00

Result 7 x

Output

Read Only

Action Output

Query Completed