



create table user\_activity(

user\_id int,

activity\_date date,

activity\_type varchar(50));

insert into user\_activity (user\_id,activity\_date, activity\_type) values (1,'2023-08-31','login');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (1,'2023-08-31','click');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (1,'2023-08-31','purchase');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (2,'2023-08-30','login');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (2,'2023-08-30','click');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (3,'2023-08-30','login');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (3,'2023-08-30','click');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (4,'2023-08-31','login');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (4,'2023-08-31','click');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (4,'2023-08-31','purchase');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (5,'2023-08-31','login');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (6,'2023-08-30','login');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (6,'2023-08-30','click');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (6,'2023-08-30','purchase');

insert into user\_activity (user\_id,activity\_date, activity\_type) values (7,'2023-08-30',NULL);

SELECT

activity\_date,

ROUND(COUNT(DISTINCT CASE WHEN activity\_type IS NOT NULL THEN user\_id END) \* 100.0 / COUNT(DISTINCT user\_id), 2) AS engagement\_rate

FROM

user\_activity

GROUP BY