USERS

|  |  |  |  |
| --- | --- | --- | --- |
| USER\_ID | NAME | GENDER | DOB |
| 1 | LATA | F | 1928-09-28 |
| 2 | ASHA | F | 1993-09-08 |
| 3 | ABHI | M | 1995-12-30 |
| 4 | SHYAM | M | 1994-11-30 |
| 5 | ANAYA | F | 1995-11-12 |
| 6 | SHUBHA | F | 1984-05-15 |
| 7 | KASHYAP | M | 1970-04-11 |
| 8 | PRIYAL | F | 2014-08-21 |
| 9 | VAIBHAV | M | 2000-09-21 |
| 10 | PRIYA | F | 2015-07-11 |
| 11 | Pooja | F | 2007-05-21 |
| 12 | Sayali | F | 2006-06-12 |
| 13 | Anupama | F | 2005-07-11 |
| 14 | Arya | F | 2004-08-13 |
| 15 | Paren | M | 2003-09-11 |
| 16 | Shyam | M | 1998-11-25 |
| 17 | Chirag | M | 1999-12-26 |
| 18 | Monik | M | 1966-11-11 |
| 19 | Isha | F | 1989-12-25 |
| 20 | Tania | F | 1995-03-12 |

POSTS

|  |  |  |
| --- | --- | --- |
| POST\_ID | USER\_ID | TEXT |
| 1 | 2 | HELLO HI |
| 2 | 3 | HELLO HI |
| 3 | 4 | HELLO |
| 4 | 2 | HH |
| 5 | 3 | HIHI |
| 6 | 10 | EFGH |
| 7 | 10 | XYZ |
| 8 | 10 | YYY |
| 9 | 11 | Ppp |
| 10 | 12 | QQQ |
| 11 | 13 | RRR |
| 12 | 14 | SSS |
| 13 | 15 | TTT |

COMMENTS

|  |  |  |  |
| --- | --- | --- | --- |
| COMMENT\_ID | POST\_ID | COMMENT\_USER\_ID | TEXT |
| 1 | 2 | 1 | HI HELLO |
| 2 | 3 | 1 | HELLO HI |
| 3 | 1 | 2 | HELLO HELLO |
| 4 | 5 | 1 | HHHH |
| 5 | 5 | 1 | ABCD |
| 6 | 6 | 5 | EEE |
| 7 | 6 | 5 | FFG |
| 8 | 7 | 8 | GFG |
| 9 | 7 | 10 | HHH |
| 10 | 7 | 7 | HHHI |
| 11 | 6 | 11 | GGG |
| 12 | 7 | 12 | III |
| 13 | 8 | 13 | JJJ |
| 14 | 6 | 14 | KKK |
| 15 | 4 | 11 | LLL |
| 16 | 4 | 12 | MMM |
| 17 | 4 | 13 | NNN |
| 18 | 5 | 11 | OOO |
| 19 | 5 | 12 | PPP |
| 20 | 3 | 11 | QQQ |
| 21 | 3 | 13 | RRR |
| 22 | 9 | 11 | SSS |
| 23 | 9 | 12 | TTT |
| 24 | 10 | 12 | UUU |
| 25 | 11 | 13 | VVV |
| 26 | 11 | 12 | WWW |
| 27 | 5 | 13 |  |
| 28 | 4 | 14 |  |
| 29 | 5 | 14 |  |
| 30 | 3 | 14 |  |
| 31 | 3 | 11 |  |
| 32 | 9 | 14 |  |

FRIENDSHIPS

|  |  |
| --- | --- |
| USER\_ID | FRIEND\_ID |
| 1 | 3 |
| 1 | 4 |
| 1 | 5 |
| 1 | 6 |
| 2 | 3 |
| 2 | 5 |
| 2 | 6 |
| 3 | 1 |
| 3 | 2 |
| 3 | 5 |
| 4 | 1 |
| 5 | 1 |
| 5 | 2 |
| 5 | 3 |
| 6 | 1 |
| 6 | 2 |
| 7 | 1 |
| 8 | 1 |
| 10 | 1 |
| 10 | 7 |
| 10 | 8 |
| 10 | 9 |
| 20 | 11 |
| 20 | 12 |
| 20 | 13 |
| 20 | 14 |
| 20 | 15 |

QUERY 1

SELECT USER\_ID, NAME FROM USERS

WHERE USER\_ID NOT IN (SELECT USER\_ID FROM POSTS)

AND USER\_ID IN (SELECT COMMENTER\_USER\_ID FROM COMMENTS WHERE POST\_ID=5);

QUERY 2

SELECT USER\_ID FROM USERS

WHERE USER\_ID IN (SELECT FRIEND\_ID FROM FRIENDSHIPS WHERE USER\_ID=1)

AND USER\_ID IN (SELECT FRIEND\_ID FROM FRIENDSHIPS WHERE USER\_ID=2) AND GENDER='F';

QUERY 3

SELECT FRIENDSHIPS.USER\_ID FROM

FRIENDSHIPS WHERE FRIENDSHIPS.FRIEND\_ID IN (SELECT POSTS.USER\_ID FROM POSTS)

GROUP BY FRIENDSHIPS.USER\_ID

HAVING COUNT(FRIENDSHIPS.FRIEND\_ID)>2;

Query 4

SELECT DISTINCT U1.USER\_ID,(SELECT COUNT(FRIEND\_ID)FROM FRIENDSHIPS WHERE FRIENDSHIPS.USER\_ID=U1.USER\_ID)AS FRIENDS

FROM (USERS U1 JOIN COMMENTS C ON U1.USER\_ID=C.COMMENTER\_USER\_ID) JOIN

(USERS U2 JOIN FRIENDSHIPS FR ON U2.USER\_ID=FR.USER\_ID)

ON U1.USER\_ID=U2.USER\_ID

WHERE C.POST\_ID IN (SELECT POSTS.POST\_ID FROM POSTS WHERE POSTS.USER\_ID=10) AND U1.DATE\_OF\_BIRTH>'1990-12-20'

AND U1.GENDER='F'

GROUP BY USER\_ID;

QUERY 5

SELECT COMMENTER\_USER\_ID AS USER\_ID FROM COMMENTS

WHERE POST\_ID=7 AND COMMENTER\_USER\_ID IN (SELECT FRIEND\_ID FROM POSTS JOIN FRIENDSHIPS ON POSTS.USER\_ID = FRIENDSHIPS.USER\_ID

WHERE POST\_ID=7);

QUERY 6

SELECT U1.USER\_ID, U1.NAME,COUNT(C1.COMMENT\_ID)

FROM (FRIENDSHIPS FR JOIN USERS U1 ON FR.FRIEND\_ID=U1.USER\_ID) JOIN COMMENTS C1 ON U1.USER\_ID=C1.COMMENTER\_USER\_ID

WHERE FR.USER\_ID=20 AND U1.GENDER='F' AND C1.COMMENT\_ID NOT IN (SELECT C2.COMMENT\_ID FROM POSTS P1 JOIN COMMENTS C2 ON P1.POST\_ID=C2.POST\_ID WHERE P1.USER\_ID=10 OR P1.USER\_ID=U1.USER\_ID) GROUP BY U1.USER\_ID

HAVING COUNT(C1.COMMENT\_ID)>=3

ORDER BY COUNT(C1.COMMENT\_ID) DESC

LIMIT 3;

SELECT USER\_ID FROM ( SELECT U.USER\_ID, U.NAME, F.FRIEND\_ID FROM USERS U INNER JOIN FRIENDSHIPS F ON U.USER\_ID = F.USER\_ID WHERE F.FRIEND\_ID IN (SELECT USER\_ID FROM POSTS)) AS TABLE1

GROUP BY TABLE1.USER\_ID HAVING COUNT(DISTINCT TABLE1.FRIEND\_ID)>2;

Select s1.USER\_ID, s2.total

FROM

(Select Distinct u.USER\_ID

From USERS u

Where u.DOB >'1990-12-20'

AND

u.USER\_ID IN (

Select c.COMMENTER\_USER\_ID

From POSTS p JOIN COMMENTS c Using (POST\_ID)

Where p.USER\_ID=10)) s1

NATURAL JOIN

(Select u2.USER\_ID,count(\*) AS total

From USERS u2 JOIN FRIENDSHIPS f2 ON u2.USER\_ID=f2.USER\_ID

Group By u2.USER\_ID) s2;

SELECT DISTINCT U1.USER\_ID,(SELECT COUNT(FRIEND\_ID)FROM FRIENDSHIPS WHERE FRIENDSHIPS.USER\_ID=U1.USER\_ID)AS FRIENDS

FROM USERS U1 JOIN COMMENTS C ON U1.USER\_ID=C.COMMENTER\_USER\_ID

WHERE C.POST\_ID IN (SELECT POSTS.POST\_ID FROM POSTS WHERE POSTS.USER\_ID=10) AND U1.DATE\_OF\_BIRTH>'1990-12-20'

AND U1.GENDER='F'

GROUP BY USER\_ID;

SELECT U1.USER\_ID, U1.NAME, COUNT(C1.COMMENT\_ID)

FROM (FRIENDSHIPS FR JOIN USERS U1,U2,U3 ON FR.FRIEND\_ID=U1,U2,U3.USER\_ID) JOIN COMMENTS C1 ON U1,U2,U3.USER\_ID=C1.COMMENTER\_USER\_ID

WHERE FR.USER\_ID=20 AND U1,U2,U3.GENDER='F' AND C1.COMMENT\_ID NOT IN (SELECT C2.COMMENT\_ID FROM POSTS P1 JOIN COMMENTS C2 ON P1.POST\_ID=C2.POST\_ID WHERE P1.USER\_ID=10 OR P1.USER\_ID=U1,U2,U3.USER\_ID) GROUP BY U1.USER\_ID

HAVING COUNT(C1.COMMENT\_ID)>=3

ORDER BY COUNT(C1.COMMENT\_ID) DESC

LIMIT 3;