1. Insert new records in tables

USE instagram;

--insert new records in a table user

INSERT INTO user (username, password)

VALUES ('pchlnts', 12345678);

INSERT INTO user (username, password)

VALUES ('yana.kuchinskaya', 595797599);

INSERT INTO user (username, password)

VALUES ('alexpchelintsev', 88888888);

INSERT INTO user (username, password)

VALUES ('sttsnk.l', 36378);

INSERT INTO user (username, password)

VALUES ('marisha_radul', 7777777);

--insert new records in a table personal_data

INSERT INTO personal_data (name, email, phone, user_id)

VALUES ('Yana Kuchinskaya', 'yanakuchinskaya123@gmail.com', '195127392', 3);

INSERT INTO personal_data (name, email, phone, user_id)

VALUES ('Tatiana Pchelintseva', 'taniapcholka@gmail.com', '1445599656', 1);

INSERT INTO personal_data (name, email, phone, user_id)

VALUES ('Alex Pchelintsev', 'alexpchelintsev@gmail.com', '1123432167', 4);

INSERT INTO personal_data (name, email, phone, user_id)

VALUES ('Elizaveta Statsenko', 'lizazaza@gmail.com', '1545637255', 10);

INSERT INTO personal_data (name, email, phone, user_id)

VALUES ('Marina Radul', 'marisharadul@gmail.com', '12346852566', 11);

--insert new records in a table followers

INSERT INTO followers (user_id, user1_id)

VALUES (1, 3);

INSERT INTO followers (user_id, user1_id)

VALUES (1, 4);

INSERT INTO followers (user_id, user1_id)

VALUES (3, 4);

INSERT INTO followers (user_id, user1_id)

VALUES (3, 1);

INSERT INTO followers (user_id, user1_id)

VALUES (10, 4);

INSERT INTO followers (user_id, user1_id)

VALUES (10, 3);

INSERT INTO followers (user_id, user1_id)

VALUES (3, 10);

INSERT INTO followers (user_id, user1_id)

VALUES (3, 11);

INSERT INTO followers (user_id, user1_id)

VALUES (11, 3);

INSERT INTO followers (user_id, user1_id)

VALUES (11, 1);

INSERT INTO followers (user_id, user1_id)

VALUES (1, 11);

--insert new records in a table post

INSERT INTO post (user_id)

VALUES (10);

INSERT INTO post (user_id)

VALUES (10);

INSERT INTO post (user_id)

VALUES (10);

INSERT INTO post (user_id)

VALUES (10);

INSERT INTO post (user_id)

VALUES (10);

INSERT INTO post (user_id)

```sql
VALUES ( 10);

INSERT INTO post ( user_id)

VALUES ( 10);

INSERT INTO post (user_id)

VALUES ( 10);

INSERT INTO post (user_id)

VALUES ( 1);

INSERT INTO post (user_id)

VALUES ( 3);

INSERT INTO post (user_id)

VALUES ( 3);

INSERT INTO post (user_id)

VALUES ( 11);

INSERT INTO post (user_id)

VALUES (11);

INSERT INTO post (user_id)

VALUES ( 11);


--insert new records in a table comment
INSERT INTO comment (user_id, post_id, text)

VALUES ( 1, 3, "beautiful");

INSERT INTO comment (user_id, post_id, text)

VALUES ( 10, 11, "delightfully");

INSERT INTO comment (user_id, post_id, text)

VALUES ( 1, 14, "OMG");

INSERT INTO comment (user_id, post_id, text)

VALUES ( 3, 13, "CUTIES :)))");

INSERT INTO comment (user_id, post_id, text)

VALUES ( 10, 14, "This took my breath away!!");

INSERT INTO comment (user_id, post_id, text)

VALUES ( 3, 14, "woowwww");
```

```sql
--insert new records in a table file
INSERT INTO file (size, type, post_id)
VALUES ( 82657, 'PNG', 1);
INSERT INTO file (size, type, post_id)
VALUES ( 52657, 'PNG', 2);
INSERT INTO file (size, type, post_id)
VALUES ( 22657, 'PNG', 3);
INSERT INTO file (size, type, post_id)
VALUES ( 72657, 'PNG', 4);
INSERT INTO file (size, type, post_id)
VALUES ( 33657, 'PNG', 5);
INSERT INTO file (size, type, post_id)
VALUES ( 42657, 'PNG', 6);
INSERT INTO file (size, type, post_id)
VALUES ( 80657, 'PNG', 7);
INSERT INTO file (size, type, post_id)
VALUES ( 82657, 'PNG', 8);
INSERT INTO file (size, type, post_id)
VALUES ( 22657, 'PNG', 9);
INSERT INTO file (size, type, post_id)
VALUES ( 55657, 'PNG', 10);
INSERT INTO file (size, type, post_id)
VALUES ( 72657, 'PNG', 11);
INSERT INTO file (size, type, post_id)
VALUES ( 66657, 'PNG', 12);
INSERT INTO file (size, type, post_id)
VALUES ( 35453, 'PNG', 13);
INSERT INTO file (size, type, post_id)
VALUES ( 34545, 'PNG', 14);
```

```sql
--insert new records in a table dialog
INSERT INTO dialog ( id)
VALUES ( 1);
INSERT INTO dialog ( id)
VALUES ( 2);
INSERT INTO dialog ( id)
VALUES ( 3);
INSERT INTO dialog ( id)
VALUES ( 4);
INSERT INTO dialog ( id)
VALUES ( 5);
INSERT INTO dialog ( id)
VALUES ( 6);


--insert new records in a table dialog_user
INSERT INTO dialog_user ( dialog_id, user_id)
VALUES ( 1, 1);
INSERT INTO dialog_user ( dialog_id, user_id)
VALUES ( 2, 3);
INSERT INTO dialog_user ( dialog_id, user_id)
VALUES ( 2, 1);
INSERT INTO dialog_user ( dialog_id, user_id)
VALUES ( 2, 10);
INSERT INTO dialog_user ( dialog_id, user_id)
VALUES ( 3, 3);
INSERT INTO dialog_user ( dialog_id, user_id)
VALUES ( 3, 11);
INSERT INTO dialog_user ( dialog_id, user_id)
VALUES ( 4, 11);
INSERT INTO dialog_user ( dialog_id, user_id)
VALUES ( 4, 1);
INSERT INTO dialog_user ( dialog_id, user_id)
```

```sql
VALUES ( 5, 10);

INSERT INTO dialog_user ( dialog_id, user_id)

VALUES ( 6, 11);


--insert new records in a table massage

INSERT INTO message ( text, user_id)

VALUES ( 'Do not forget to buy avocados!!!!!' , 1);

INSERT INTO message ( text, user_id)

VALUES ( 'Hello!', 3);

INSERT INTO message ( text, user_id)

VALUES ( 'Do not forget to buy milk!!!' ,11 );

INSERT INTO message ( text, user_id)

VALUES ( 'Hello!', 10);

INSERT INTO message ( text, user_id)

VALUES ( 'Call me' , 1);

INSERT INTO message ( text, user_id)

VALUES ( 'Hello!', 11);


--insert new records in a table dialod_massage

INSERT INTO dialog_message ( dialog_id, message_id)

VALUES ( 1,1);

INSERT INTO dialog_message ( dialog_id, message_id)

VALUES ( 2, 2);

INSERT INTO dialog_message ( dialog_id, message_id)

VALUES ( 6, 3);

INSERT INTO dialog_message ( dialog_id, message_id)

VALUES ( 3, 4);

INSERT INTO dialog_message ( dialog_id, message_id)

VALUES ( 4, 5);

INSERT INTO dialog_message ( dialog_id, message_id)

VALUES ( 5, 6);
```

2. Functionalities

1. Trivial query for personal_data table
2. Trivial query for followers table
3. Show the name and phone number of each user
4. Show user's publications and their name
5. Show the author of the comment, its content and commented publication
6. Show the number of posts of each person's user
7. Show belonging people to the dialogue

--FUNCTIONALITIES:

-- 1 -- Trivial query for personal_data table

SELECT * FROM personal_data;

-- 2 -- Trivial query for followers table

SELECT * FROM followers

--3 -- INNER JOIN Example 2 tables

CREATE VIEW third_table AS

SELECT user.username, personal_data.name, personal_data.phone

FROM user

INNER JOIN personal_data

ON user.id = personal_data.user_id;

--4 -- INNER JOIN Three Tables

CREATE VIEW fourth_table AS

SELECT user.username, personal_data.name, post.id

FROM ((user

INNER JOIN personal_data ON user.id = personal_data.user_id)

INNER JOIN post ON user.id = post.user_id);

-- 5 -- RIGHT JOIN Example

CREATE VIEW fifth_table AS

SELECT user.username, comment.post_id, comment.text

```
FROM user

RIGHT JOIN comment

ON user.id = comment.user_id;
```

-- 6 -- The COUNT() function returns the number of rows that --matches a specified criteria.

```
CREATE VIEW sixth_table AS

SELECT user.username,  COUNT(post.id)

FROM user

LEFT JOIN post ON user.id = post.user_id

GROUP BY user.username;
```

-- 7 -- ORDER BY

```
CREATE VIEW seventh_table AS

SELECT dialog_user.dialog_id,  user.username

FROM dialog_user

JOIN user ON dialog_user.user_id = user.id

ORDER BY  dialog_user.dialog_id


SELECT * FROM third_table;

SELECT * FROM fourth_table;

SELECT * FROM fifth_table;

SELECT * FROM sixth_table;

SELECT * FROM seventh_table;
```