(5 marks)

Consider the following relational schema of an online cloud storage management system:

USER

user_id	name	email	address	mobile_no	designation	mgr_id

USER_LOGIN

login_id	password	user_id	init_date	exp_date	server_id

SERVER

server_id	server_name	mgr_id

FILE

hash_id	file_name	creation_date	created_login_id	last_op_id	server_id

FILE_OPERATIONS

op_id	file_hash_id	login_id	mgr_id	operation	status	date	time

Operation can have values – *read, write* or *delete*
status can have values – *pending, approved,* or *rejected.*

Questions

1. Which of the following is not a data definition language

(0.5 marks)

(a)RENAME
(b)REVOKE
(c)GRANT
(d)UPDATE
2. Identify the interpretation of the SQL query   (1.5 marks)

SELECT u.user_id, u.name
FROM user u
WHERE u.user_id NOT IN (SELECT l.user_id
                    FROM USER_LOGIN l,FILE OPERATIONS f
                    WHERE l.login_id = f.login_id);

3. Write an SQL query to find the list of users who requested more than one file operation

(1.5 marks)

4. Identify the interpretation of the SQL query   (1.5 marks)

SELECT u.user_id,
FROM USER u, FILE OPERATIONS f, USER_LOGIN l
 WHERE u.user_id=l.user_id AND l.login_id = f.login_id
AND f.status= rejected AND f.operation =delete