

**SQL Questions**  
**SET 1**

**(5 marks)**

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

USER

<u>user_id</u>	name	email	address	mobile_no	designation	mgr_id
----------------	------	-------	---------	-----------	-------------	--------

USER\_LOGIN

<u>login_id</u>	password	user_id	init_date	exp_date	server_id
-----------------	----------	---------	-----------	----------	-----------

SERVER

<u>server_id</u>	server_name	mgr_id
------------------	-------------	--------

FILE

<u>hash_id</u>	file_name	creation_date	created_login_id	last_op_id	server_id
----------------	-----------	---------------	------------------	------------	-----------

FILE\_OPERATIONS

<u>op_id</u>	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. Give the correct interpretation of the following SQL query: (1.5 marks)

```
select file_name
from FILE
where last_op_id in (Select op_id
                    from FILE_OPERATIONS
                    where operation = 'delete ' and status = 'approved');
```

2. Write an SQL query to find the managers and the number of users they are managing. (1.5 marks)

mgr_id	num_users
--------	-----------

3. Give the correct interpretation of the following sql query: (1.5 marks)

```
select server_name
from SERVER
where server_id IN (select SERVER.server_id
                    from FILE, SERVER
                    where FILE.server_id = SERVER.server_id
                    group by server_id
                    having count(*)>100);
```

4. Which of the following sql commands is used to modify the schema of a relation: (0.5 marks)

- a) ALTER
- b) UPDATE
- c) MODIFY
- d) CHANGE