

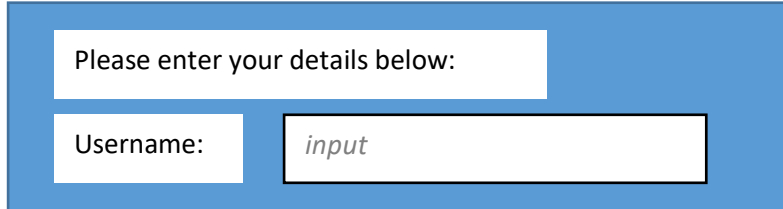
Question 8.1 – Fill out the following table.

Threats to Databases	Explanation	Possible Causes	Possible Control Measures
Loss of Integrity	improper modification of information		
Loss of Availability	legitimate user cannot access data objects		
Loss of confidentiality	unauthorized disclosure of confidential information		

Question 8.2

A website requires users to enter their username. The details for that username are then returned.

Users see the following interface:



The user's details are retrieved from the login page with the following implementation:

(Note: The value of txtUsername will be the user's input.)

```
txtUsername = getRequestString("Username");  
txtSQL = "SELECT *  
        FROM USERS  
        WHERE Username =" + txtUsername;
```

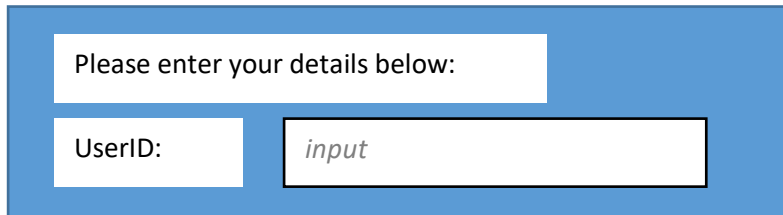
Using your knowledge of SQL Injection, what input can be entered so that the 'USERS' table is dropped?

User"; DROP TABLE USERS WHERE "1" = "1

Question 8.3

A website requires users to enter their userID. The details for that userID are then returned.

Users see the following interface:



The user's details are retrieved from the login page with the following implementation:

(Note: The value of txtUserID will be the user's input.)

```
txtUserId = getRequestString("UserID");  
txtSQL = "SELECT *  
        FROM USERS  
        WHERE UserID =" + txtUserId;
```

Using your knowledge of SQL Injection, what input can be entered so that information from all users is selected?

User" OR "1" = "1

(reference: https://www.w3schools.com/sql/sql_injection.asp)

DISCUSSION

What are risks associated with SQL Injection attacks? What preventative measures are possible against SQL injection attacks? No answers will be provided for this question