I/We realize that the penalty for turning in work that is not my own, or assisting others in doing so, can range from an "F" in the class to dismissal from Trinity University. I realize that it is a violation of academic integrity to share any portion of this lab with any person (outside my 3321 team & professor)!

Print Name _____ Time Required = _____.____ Hrs.

Signature _____ (pledged)

Visual Studio Windows Form Application #2
Individual Assignment
25 Points

_____ {Initial/Pledge} I realize that no lab will be complete until

[A] I turn in a pledge form (like this one) ➔ I realize that I need to include the amount of time I spend on the lab

[B] I place any items to be graded in my "To Be Graded Folder" ➔ do not turn in pledge form until all required items (if any) are in the folder.

_____ {Initial/Pledge} I realize that all labs, posted on the schedule page, will be due at the beginning of the next class period unless there is a dated indicating otherwise ➔ please place your labs on the desk up front as you enter class. Please be on time and quickly log into your computer.

_____ {Initial/Pledge} I have completed all of steps/tasks in **Visual Studio Windows Form Application #2.**

_____ {Initial/Pledge} With the exception of color, the Usert.cs form in my project looks much like the one above. I have worked step by step through the tutorial.

_____ {Initial/Pledge} Double-Check ➔ Each of my buttons, except Search and Reports, have mouse-over tool tips that better explain the functionality.

_____ {Initial/Pledge} When clicked, the DATA button will blank out all data entry fields on all tabs ➔ and then ➔ show what might be sample data in all data entry fields of all tabs.

_____ {Initial/Pledge} I have placed copies of LibraryApp1, LibraryApp2 & LibraryApp3 in my "To Be Graded".folder on Mars.

_____ {Initial/Pledge} I have printed a screen capture of my form and stapled it to the back of this lab. There will be a stapler in class. There will be a stapler in my lab 270S ➔ you have access.

_____ {Initial/Pledge} I have placed copies of LibraryApp1, LibraryApp2 & LibraryApp3 on either my flash drive or my personal computer.

_____ {Initial/Pledge} I have recorded the amount of time this lab required (to the nearest quarter of an hour) at the top where I printed my name.

Form Guidelines

1] _____ One of the Guidelines, in the tutorial, states that if there is a primary key, such as the ID, place it near the T_?_ of the form.

2] _____ One of the Guidelines, in the tutorial, states that there will generally be information, which helps to identify this record, that should be placed near the T_? of the form.

3] _____ One of the Guidelines, in the tutorial, states that there will generally be some critical identification information that should be places at the top of every tab – to help identify the Re_?_ in view.

4] _____ One of the Guidelines, in the tutorial, states that it is a great idea to get to have your stakeholder review, and use, a first form E_?_ in the design process ➔ this might help you avoid making similar corrections on many other forms.

5] _____ One of the Guidelines, in the tutorial, states that lots of form design De_?_ are best made early ➔ this includes choices in color schemes, use of tabs, button choices, menustrips, etc.

6] _____ One of the Guidelines, in the tutorial, states that all buttons should be well named and the button Text/Image shall help to clearly ID_?_ the purpose/functionality.

7] _____ One of the Guidelines, in the tutorial, states that all button color combinations should be consistent and Pr_?_; they shall go well with the form.

8] _____ One of the Guidelines, in the tutorial, states that whether we use buttons with Text, or Image, we should often use To_?_ to help clarify the purpose/functionality.

Database

1] _____ DBMS is an acronym for _?_.

2] _____ SQL is an acronym for _?_.

3]   _____ A
compound SQL query might very well use AND to join two conditions ➔ the same thing would happen if you
place the symbol(s) _?_ in between the conditions.

4]   _____ A
compound SQL query might very well use OR to join two conditions ➔ the same thing would happen if you place
the symbol(s) _?_ in between the conditions.

5]   _____ A
compound SQL query might very well use NOT before a condition ➔ the same thing would happen if you place
the symbol(s) _?_ in between the conditions.

SHOW DATABASES

1]   _____
Write   the line of SQL code to display a list of all of the databases.

Import Database

1]   Reload the UniversityLibrary.sql database.
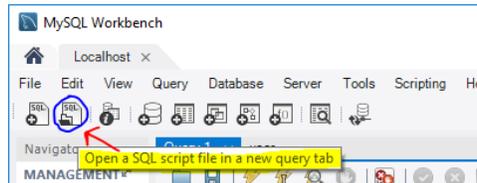
2]   Select **UniversityLibrary.sql** ➔ on your desktop

3]   _____
Write   the line of SQL code to make **UniversityLibrary** the current/default database.

4]   _____
Write   the line of SQL display a list of all of the tables in the current database.

```
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| ID           | int(11)      | NO   | PRI | NULL    | auto_increment |
| First        | varchar(15)  | YES  |     |         |                |
| MI           | char(1)      | YES  |     | NULL    |                |
| Last         | varchar(20)  | YES  |     |         |                |
| FullName     | varchar(30)  | YES  |     |         |                |
| DeptID       | int(11)      | YES  |     | 0       |                |
| GenderID     | int(11)      | YES  |     | NULL    |                |
| UniversityID | bigint(11)   | YES  |     | NULL    |                |
| Email        | varchar(40)  | YES  |     |         |                |
| UserName     | varchar(15)  | YES  |     |         |                |
| Password     | varchar(15)  | YES  |     | trinity |                |
| Administrator| char(1)      | YES  |     | NULL    |                |
| HomePhone    | varchar(14)  | YES  |     | NULL    |                |
| CellPhone    | varchar(14)  | YES  |     | NULL    |                |
| Notes        | varchar(255) | YES  |     |         |                |
| Deleted      | char(1)      | YES  |     | F       |                |
+--------------+--------------+------+-----+---------+----------------+
```

5-6]   One of the tables in the current database is **User**. Write two different queries to display the record layout for **User**. The output of the queries may be seen above.

_____

_____

7]   _____ Table
User has _?_ fields.

```
+---------+--------------+------+-----+---------+----------------+
| Field   | Type         | Null | Key | Default | Extra          |
+---------+--------------+------+-----+---------+----------------+
| id      | int(11)      | NO   | PRI | NULL    | auto_increment |
| title   | varchar(180) | YES  | MUL | NULL    |                |
| author  | varchar(105) | YES  |     | NULL    |                |
| price   | double       | YES  | MUL | NULL    |                |
| genreid | int(11)      | YES  | MUL | NULL    |                |
| deleted | char(1)      | YES  |     | NULL    |                |
+---------+--------------+------+-----+---------+----------------+
```

8]   Another of the tables in the current database is **Book**. Write a query to display the record layout for **Book**. The output of the query may be seen above.

_____

9]   _____ Table
Book has _?_ fields.

SELECT COUNT(*) FROM

1]   _____
Write   the line of SQL code to display the number of **User** records.

2]   _____
Write   the line of SQL code to display the number of **Book** records.

SELECT COUNT(ID) FROM

1]   _____
Write   the line of SQL code to display the number of **User** records that have an ID.

2]   _____
The number of **User** records that have an ID is _?_.

3]   _____
Write   the line of SQL code to display the number of **Book** records that have an ID.

SELECT COUNT(UniversityID) FROM

1]   _____
       Write   the line of SQL code to display the number of **User** records that have a UniversityID.

2]   _____
       The number of **User** records that have a FullName is _?_.

       INSERT INTO User(First, Last, MI) VALUES ("Donald", "Duck", "A");

3]   _____

       _____
       Execute COUNT(UniversityID); the number is not explain.

SELECT x, y, z FROM WHERE

1]   Write a query that displays the ID, First, Last, & FullName of all **User**.

2]   Write a query that displays the ID, First, Last, & FullName of all valid (undeleted) **User**.

3]   Write   the line of SQL code to display the number of valid (undeleted) **User**.

4]   _____
       The number of valid (undeleted) **User** = _?_.

5]   Write   the line of SQL code to display the number of valid (undeleted) **User**.

6]   Write a query that displays the ID, First, & Last of all **User** whose ID is in the range 10 – 20. DO NOT USE
       BETWEEN!

7]   Write a query that displays the ID, First, & Last of all **User** whose ID is in the range 10 - 20 → order by FullName. USE BETWEEN!

SELECT * FROM   ORDER BY

1]   Write a query that displays all of the information in the **User** table in order by FullName.

2]   Write a query that displays the ID and FullName of all **User** table in order by **ID**.

3]   Write a query that displays the ID and FullName of all **User** table in descending order by **ID**.

% MOD

```
SELECT 25 % 6,  25 % 5,  25 % 10,  25 % 9;
```

1]   _____
       Write the output from the query above?. Does not use function MOD

```
SELECT MOD(25,6),  mod(25, 5),  Mod(25, 10),  Mod(25,9);
```

2]   _____
       Write the output from the query above?. Does use function MOD

3]   Write a query that displays the ID, First, & Last of all valid (undeleted) **User** whose ID in the range {2,4,6,8,…}. Use function MOD.

4]   Write a query that displays the ID, First, & Last of all valid (undeleted) **User** whose ID in the range {2,4,6,8,…}. Do not use function MOD.

5]   Write a query that displays the ID, First, & Last of all **User** whose ID in the range {21, 24, 27, 30, …, 99}

SELECT * FROM   LIMIT

```
mysql> SELECT ID, First, GenderID
    -> FROM User
    -> WHERE (GenderID = 1) AND (Deleted = "F")
    -> ORDER BY First;
+----+----------+----------+
| ID | First    | GenderID |
+----+----------+----------+
| 23 | Amira    |        1 |
|  7 | Caroline |        1 |
| 73 | Caroline |        1 |
| 29 | Cristina |        1 |
| 49 | Emily    |        1 |
| 99 | Kayako   |        1 |
| 50 | Kayla    |        1 |
|  3 | Madison  |        1 |
| 12 | Monica   |        1 |
|  9 | Morgan   |        1 |
| 21 | Nina     |        1 |
| 38 | Rachel   |        1 |
| 14 | Reanna   |        1 |
| 54 | Reidlee  |        1 |
| 77 | Richard  |        1 |
| 66 | Robin    |        1 |
| 95 | Sam      |        1 |
| 41 | Sharon   |        1 |
+----+----------+----------+
18 rows in set (0.00 sec)
```

1]   _____ Look at the output in the graphic above. What first names would be listed in the query below. Unfortunately, LIMIT is not supported in most databases, including MSSQL.

SELECT First

FROM User

WHERE (GenderID = 1) AND (Deleted = "F")

Order By First

LIMIT 3;

2] _____ What
first names would be listed in the query below.
```
SELECT First
FROM User
WHERE (GenderID = 1) AND (Deleted = "F")
Order By First
LIMIT 3,2;
```

3] _____ What
first names would be listed in the query below.
```
SELECT First
FROM User
WHERE (GenderID = 1) AND (Deleted = "F")
Order By First
LIMIT 0,1;
```

3] _____ What
first names would be listed in the query below.
```
SELECT First
FROM User
WHERE (GenderID = 1) AND (Deleted = "F")
Order By First
LIMIT 1,1;
```

4] _____ The
query below shows only the second user in the query view. Who is that person?
```
SELECT First
FROM User
WHERE (GenderID = 1) AND (Deleted = "F")
Order By First
LIMIT 3,1;
```

5] _____ The
query below shows only the second user in the query view. Who is that person?
```
SELECT First
FROM User
WHERE (GenderID = 1) AND (Deleted = "F")
Order By First
LIMIT 4,1;
```

6] _____ The
query below shows only the third user in the query view. Who is that person?
```
SELECT First
FROM User
WHERE (GenderID = 1) AND (Deleted = "F")
Order By First
LIMIT 5,1;
```

SELECT * FROM   =   LIKE

1]   Write a query that displays the ID, First, & Last of all **User** whose first name is "**Zach**". Do not use **Like**. Use an Exact Match.

2]   There ae _?_ folks in User whose first name is "Zach". Do not use **Like**.

3]   Write a query that displays the ID, First, & Last of all **User** whose first name starts with "**Sa**". Use **Like**. Use a Non- Exact Match.

4]   Write a query that displays the ID & First of all **User** whose first name starts with either an "**S**" or an "**A**".

What To Turn In

1]   All pages of this lab with questions completed.

2]   Screen Capture stapled To The Back Of This Lab.

- - - - - - - - - - - No Lab Is Complete Until Both Are Complete - - - - - - - - - - -

1]   You sign & submit the Pledge form at the top of this lab!. No Lab Will Be Considered Complete until this is done. Late penalties will continue to accrue until the pledge form is submitted.
   a)   Sign & Pledge
   b)   Record the amount of time you think you spent on this lab
   c)   Staple all pages of this lab. Fold in half length-wise (like a hot-dog). Put your name on the outside. Place it on the professor desk before the beginning of lecture on the day it is due. The penalty for late homework will not exceed 25% off per day.
   d)   Short answer questions must be hand written, unless the professor has granted an exception for physical reasons.

2]   Place all programming code associated with this program, if any, in the Professor's Code Drop Box or on the Virtual System as directed.
       I do not accept programs by mail; do not submit labs via email!