NOTE:[This PDF contain all tasks will screenshots, I have also attached all php files and .sql files]

NAME :: IBRAR BABAR

ROLL NO. 19P-0104

DATABASE LAB

ASSIGNMENT#2

Question # 01

source G:\4th Semester\DataBase_Lab\Assignments\Assignment#2\university.sql

```
mysql> source G:\4th Semester\DataBase_Lab\Assignments\Assignment#2\university.sql
Query OK, 0 rows affected, 1 warning (0.02 sec)

Query OK, 1 row affected (0.01 sec)

Database changed
Query OK, 0 rows affected (0.45 sec)

Query OK, 2 rows affected (0.08 sec)
Records: 2  Duplicates: 0  Warnings: 0

Query OK, 0 rows affected (0.68 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

CREATE TABLE courses (

 course_code varchar(10) NOT NULL,

 credit_hour INT NOT NULL,

 course_name VARCHAR(16) NOT NULL,

 PRIMARY KEY (course_code)

);

```
mysql> CREATE TABLE courses (
    ->  course_code varchar(10) NOT NULL,
    ->  credit_hour INT NOT NULL,
    ->  course_name VARCHAR(16) NOT NULL,
    ->  PRIMARY KEY (course_code)
    -> );
Query OK, 0 rows affected (0.40 sec)
```

create table study(

roll_no varchar(10) not null,

course_code varchar(10) not null,

primary key(roll_no,course_code)

);

```
mysql> create table study(
    -> roll_no varchar(10) not null,
    -> course_code varchar(10) not null,
    -> primary key(roll_no,course_code)
    -> );
Query OK, 0 rows affected (0.40 sec)
```

```
mysql> use university
Database changed
mysql> show tables;
+---------------------+
| Tables_in_university |
+---------------------+
| courses             |
| student             |
| study               |
+---------------------+
3 rows in set (0.43 sec)
```

COURSE REGISTRATION FORM

```html
<html>
<head>
 <title>Registration Form</title>
</head>
<body>
<?php if (isset($_GET['form_submitted'])){
//this code is executed when the form is submitted
?>
<h2>Thank You <?php echo "Course Registration from"; ?>
</h2>
<p>You have been registered as
 <?php echo "<br />"; ?>
```

```php
<?php echo "course_code : " . $_GET['course_code'];?>
<?php echo "<br />"; ?>
<?php echo "credit_hour : " . $_GET['credit_hour'];?>
<?php echo "<br />"; ?>
<?php echo "course_name : " . $_GET['course_name'];?>
<?php
$username = 'root';
$password = '';
try {
$conn = new
PDO("mysql:host=localhost;dbname=university", $username,
$password);
// set the PDO error mode to exception
$conn->setAttribute(PDO::ATTR_ERRMODE,
PDO::ERRMODE_EXCEPTION);
echo "Connected successfully";
} catch (PDOException $e) {
echo "Connection failed: " . $e->getMessage();
}
$course_code = $_GET["course_code"];
$credit_hour = $_GET["credit_hour"];
$course_name = $_GET["course_name"];
//$conn-
>query("insert into courses values('$course_code ',' $credit_hour ',' $course_nam
e')");
$conn-
>query("insert into courses values(' $course_code ',' $credit_hour ',' $course_na
me')");


?>
</p>
<p>Go <a href="/lab/assign2.php">back</a> to the
form</p>
<?php }
else { ?>
<h2>Course Registration Form</h2>
<form action="Assign2.php" method="GET">
course_code:
<input type="text" placeholder="course_code"
name="course_code">
<br> credit_hour:
<input type="text" placeholder="credit_hour"
name="credit_hour">
<br> course_name:
```
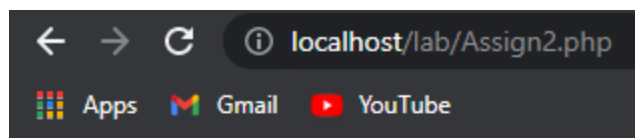
```
 <input type="text" placeholder="course_name"
name="course_name">

 <input type="hidden" name="form_submitted"
value="1" />
 <br>
 <input type="submit" value="Submit">
 </form>
<?php } ?>
</body>
</html>
```
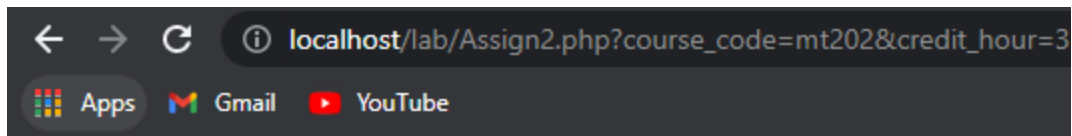

Course Registration Form

course_code: [course_code]
credit_hour: [credit_hour]
course_name: [course_name]
[Submit]

Course Registration Form
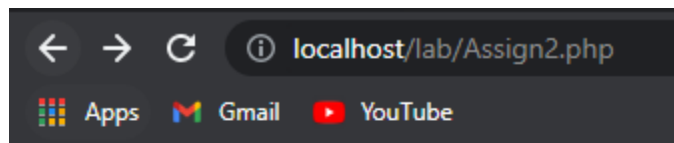
course_code: [mt202]
credit_hour: [3]
course_name: [Probability]
[Submit]

Thank You Course Registration from

You have been registered as
course_code : mt202
credit_hour : 3
course_name : Probability Connected successfully

Go back to the form

```
mysql> select * from courses;
Empty set (0.00 sec)

mysql> select * from courses;
+-------------+-------------+-------------+
| course_code | credit_hour | course_name |
+-------------+-------------+-------------+
|   mt202     |           3 | Probability |
+-------------+-------------+-------------+
1 row in set (0.00 sec)
```

NOW I HAVE THESE THREE TABLES.

```
mysql> select * from student;
+----------+----------------+----------+--------+------------+-------------+
| roll_no  | st_name        | f_name   | gender | contact    | address     |
+----------+----------------+----------+--------+------------+-------------+
| 19P-0085 | Asjid          | Tahir    | Male   | 3334177865 | 9S-5T-21    |
| 19P-0104 | ibrar          | Afzaal   | Male   | 3364177810 | B1-2S-29    |
| 19P-0105 | sherry         | ameen    | Male   | 3044377662 | P6-W9-53    |
| P19-6015 | Ali Abbas Khan | Niaz Khan| Male   | 03349174958| asdjflasdjfl|
+----------+----------------+----------+--------+------------+-------------+
4 rows in set (0.14 sec)
```

```
mysql> select * from courses;
+-------------+-------------+------------------+
| course_code | credit_hour | course_name      |
+-------------+-------------+------------------+
|  mt202      |           3 |  Probability     |
|  ce232      |           3 |  Machine Learning|
|  cs220      |           3 |  Operating system|
|  cs302      |           1 |  Database lab    |
|  CS709      |           3 |  Calculus        |
+-------------+-------------+------------------+
5 rows in set (0.07 sec)
```

```
mysql> select * from study;
+----------+-------------+
| roll_no  | course_code |
+----------+-------------+
| 19P-0085 |   mt202     |
| 19P-0104 |   CS220     |
| 19P-0104 |   CS709     |
| 19P-0105 |   CS302     |
| P19-6015 |   ce232     |
+----------+-------------+
5 rows in set (0.02 sec)
```

```html
<html>
<head>

    <title>Student Information</title>
    <style type="text/css">
#side_bar{
background-color: whitesmoke;
padding: 50px;
width: 150px;
height: 150px;
}
</style>
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3
.1/css/bootstrap.min.css" integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T" crossorigin="an
onymous">
</head>
<body>
<?php if (isset($_POST['roll_no'])) {

    $username = 'root';
    $password = '';
```

```php
    // Check connection
    try {
        $conn = new PDO("mysql:host=localhost;dbname=university", $username, $pas
sword);
        // set the PDO error mode to exception
        $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
        echo "Connected successfully";
    } catch(PDOException $e) {
        echo "Connection failed: " . $e->getMessage();
    }

    $roll_no = $_POST["roll_no"];

    // where user id = 1301 OR 1=1

    $query_1 = $conn->prepare("select * from student where roll_no = ?");
    $query_1->execute([$roll_no]);
    $result = $query_1->fetchAll(PDO::FETCH_ASSOC);

  // $query_1 = $conn->prepare("select * from study where roll_no = ?");
    //$query_1->execute([$roll_no]);
    //$result = $query_1->fetchAll(PDO::FETCH_ASSOC);

 //    die;
    ?>
    <h2>Searched Student <?php echo "Information"; ?></h2>
    <table class="table">
        <thead>
        <tr>
            <th>Roll NO</th>
            <th>Student Name</th>
            <th>Father Name</th>
            <th>Gender</th>
            <th>Contact</th>
            <th>Address</th>
        </tr>
        </thead>

        <tbody>
        <?php
        foreach ($result as $key=>$value){
            echo '<tr>
                <td>'.$value["roll_no"].'</td>
                <td>'.$value["st_name"].'</td>
                <td>'.$value["f_name"].'</td>
```

```php
                <td>'.$value["gender"].'</td>
                <td>'.$value["contact"].'</td>
                <td>'.$value["address"].'</td>
            </tr>';
        }

        ?>



        </tbody>
    </table>

    <?php
                $roll_no = $_POST["roll_no"];
                $query_1 = $conn-
>prepare("select * from study where roll_no = ?");
                $query_1->execute([$roll_no]);
                $result = $query_1->fetchAll(PDO::FETCH_ASSOC);
        ?>
        <h2>Registered Courses</h2>
        <table class="table">
        <thead>
        <tr>
            <th>Roll NO</th>
            <th>Course Code</th>
        </tr>
        </thead>

        <tbody>
        <?php
        foreach ($result as $key=>$value){
            echo '<tr>
                <td>'.$value["roll_no"].'</td>
                <td>'.$value["course_code"].'</td>
            </tr>';
        }
        ?>
        </tbody>
    </table>
    <?php
                $roll_no = $_POST["roll_no"];
                $query_1 = $conn->prepare("select * from courses join study
                using (course_code) join student using (roll_no) where roll_no !=
?");
                $query_1->execute([$roll_no]);
```

```php
                $result = $query_1->fetchAll(PDO::FETCH_ASSOC);
        ?>
        <h2>Available Courses</h2>
        <table class="table">
        <thead>
        <tr>
            <th>Course Code</th>
            <th>Credit Hour</th>
            <th>Course Name</th>
        </tr>
        </thead>

        <tbody>
        <?php
        foreach ($result as $key=>$value){
            echo '<tr>
                <td>'.$value["course_code"].'</td>
                <td>'.$value["credit_hour"].'</td>
                <td>'.$value["course_name"].'</td>
                <td>
                <a href="Assign2.php" class="btn btn-
primary" role="button">Register</a>
                </td>
                </tr>';
        }
        ?>
        </tbody>
    </table>



    <?php
}
else {
    ?>
<div class="row">
<div class="col-md-4" id="side_bar">
<ul>
    <h2>Search Student.</h2>
    <form action="abc.php" method="POST">
        Roll NO:
        <input type="text" name="roll_no">
        <button>Search</button>
    </form>
</ul>
```
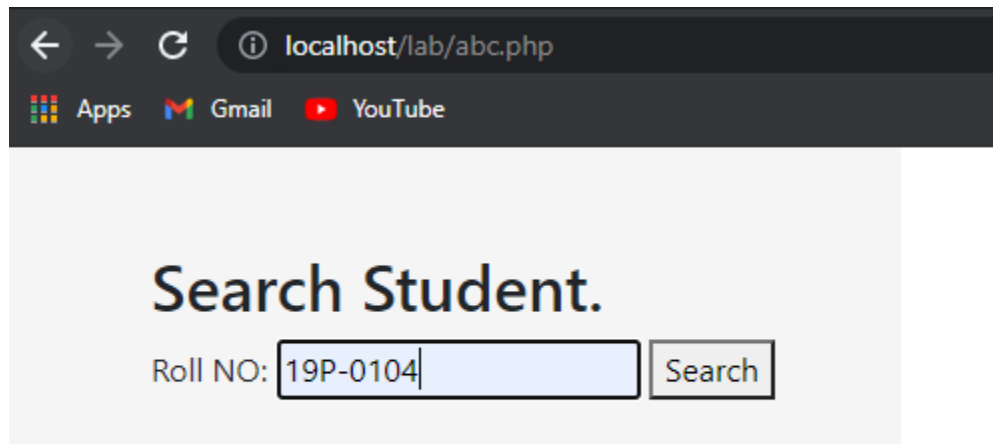
```
    </div>
  </div>


      <?php
}
?>
</body>
</html>
```


localhost/lab/abc.php

Apps   Gmail   YouTube

Search Student.

Roll NO: 19P-0104   Search

Searched Student Information

Roll NO	Student Name	Father Name	Gender	Contact	Address
19P-0104	ibrar	Afzaal	Male	3364177810	B1-2S-29

Registered Courses

Roll NO	Course Code
19P-0104	CS220
19P-0104	CS709

Available Courses

Course Code	Credit Hour	Course Name	
mt202	3	Probability	Register
cs302	1	Database lab	Register
ce232	3	Machine Learning	Register

Question # 02

create database person;

USE PERSON;

CREATE TABLE USERS (

USER_ID MEDIUMINT(8) UNSIGNED NOT NULL AUTO_INCREMENT,

USERNAME VARCHAR(15) NOT NULL,

PASSWORD VARCHAR(20) NOT NULL,

EMAIL VARCHAR(30) NOT NULL,

PRIMARY KEY (USER_ID)

);

INSERT INTO USERS VALUES(1, 'ali', 'max', 'Am@GMAIL.COM');

INSERT INTO USERS VALUES(2,'super','user','sup@GMAIL.COM');

INSERT INTO USERS VALUES(3,'fast','exam12','fast123@GMAIL.COM');

INSERT INTO USERS VALUES(4,'nawaz','vpn68','nuces@yahoo.COM');

INSERT INTO USERS VALUES(5,'aslam','dopxyz','supreme@yahoo.COM');

INSERT INTO USERS VALUES(6,'rimsha','punjab','giki5@outlook.COM');

INSERT INTO USERS VALUES(7,'ibrar','hello','hyed@gamil.COM');

INSERT INTO SUMMARY VALUES(1,7,2,1,4);

```
mysql> select * from users;
+---------+----------+----------+--------------------+
| user_id | username | password | email              |
+---------+----------+----------+--------------------+
|       1 | ali      | max      | am@gmail.com       |
|       2 | super    | user1    | sup@gmail.com      |
|       3 | fast     | exam12   | fast123@gmail.com  |
|       4 | nawaz    | vpn68    | nuces@yahoo.com    |
|       5 | aslam    | dopxyz   | supreme@yahoo.com  |
|       6 | rimsha   | punjab   | giki5@outlook.com  |
|       7 | ibrar    | hello    | hyed@gmail.com     |
+---------+----------+----------+--------------------+
7 rows in set (0.16 sec)

mysql> select * from summary;
+----+-------------+-------+---------+-------+
| id | total_users | Yahoo | outlook | Gmail |
+----+-------------+-------+---------+-------+
|  1 |           7 |     2 |       1 |     4 |
+----+-------------+-------+---------+-------+
1 row in set (0.00 sec)
```

Delimiter $$

create TRIGGER updatation_abc after update on users

for each row begin

declare yahoo_count int;

declare gmail_count int;

declare outlook_count int;

set yahoo_count =(select count(email) from users where email like("%%@yahoo.com"));

set gmail_count =(select count(email) from users where email like("%%@gmail.com"));

set outlook_count =(select count(email) from users where email like("%%@outlook.com"));

update summary set

yahoo=yahoo_count,

gmail =gmail_count,

outlook =outlook_count

where id=1;

end$$


```
mysql> Delimiter $$
mysql> create TRIGGER updatation_abc after update on users
    -> for each row begin
    -> declare yahoo_count int;
    -> declare gmail_count int;
    -> declare outlook_count int;
    -> set yahoo_count =(select count(email) from users where email like("%%@yahoo.com"));
    -> set gmail_count =(select count(email) from users where email like("%%@gmail.com"));
    -> set outlook_count =(select count(email) from users where email like("%%@outlook.com"));
    -> update summary set
    ->
    ->  yahoo=yahoo_count,
    -> gmail =gmail_count,
    -> outlook =outlook_count
    -> where id=1;
    -> end$$
Query OK, 0 rows affected (0.05 sec)
```


update users set email="am@outlook.com" where user_id=1;

$$

```
mysql> update users set email="am@outlook.com" where user_id=1;
    -> $$
Query OK, 1 row affected (0.24 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from summary$$
+----+-------------+-------+---------+-------+
| id | total_users | Yahoo | outlook | Gmail |
+----+-------------+-------+---------+-------+
|  1 |           7 |     2 |       2 |     3 |
+----+-------------+-------+---------+-------+
1 row in set (0.00 sec)
```