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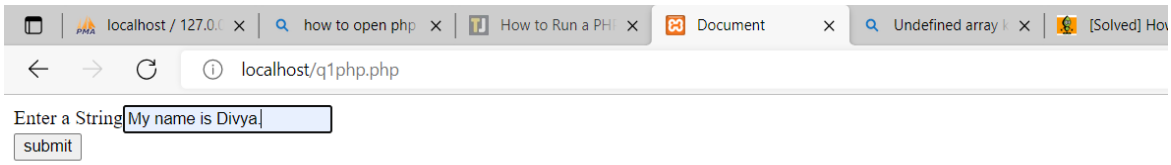
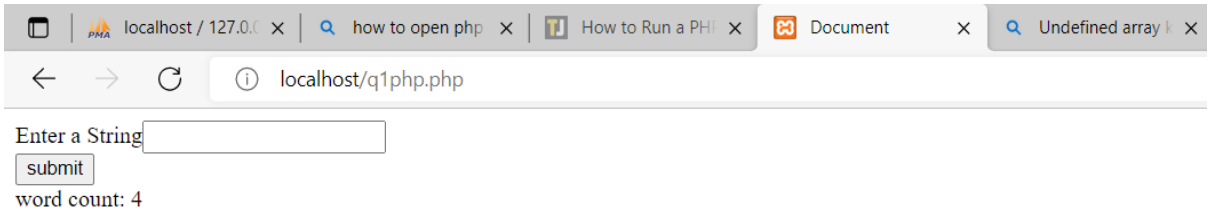
Q1 Write a PHP script to count number of words in a string.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
</head>
<body>
<form action="q1php.php" name="f1" method="POST">
Enter a String<input type="text" name="string"><br>
<input type="submit" name="submit" value="submit">
</form>
<?php
extract($_POST);
if(isset($submit))
{
$a=$string;
$b=str_word_count($a);
echo "word count: $b";
}
?>
</body>
</html
```

Output:

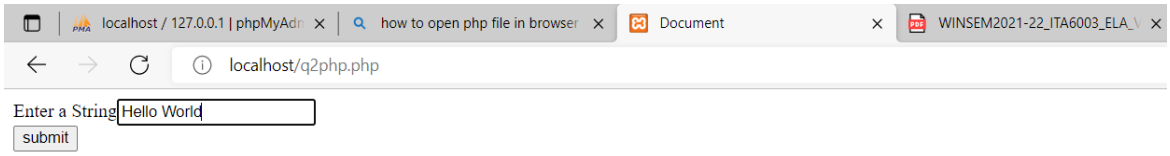


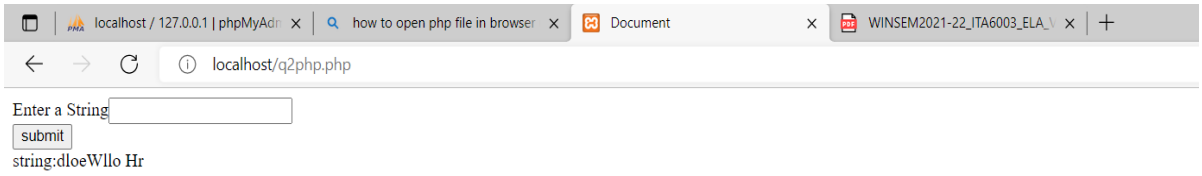


Q2 Develop a PHP script to convert the string, say “Hello World” into “aolleHaadlroWa”.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
</head>
<body>
<form action=""  method="POST">
Enter a String<input type="text" name="string" ><br>
<input type="submit" value="submit" name="submit">
</form>

<?php
extract($_POST);
if(isset($submit))
{
    $namestring=$string;
    $namesh=str_shuffle($namestring);
    echo "string:$namesh";
}
?>
</body>
</html>
```

Output:

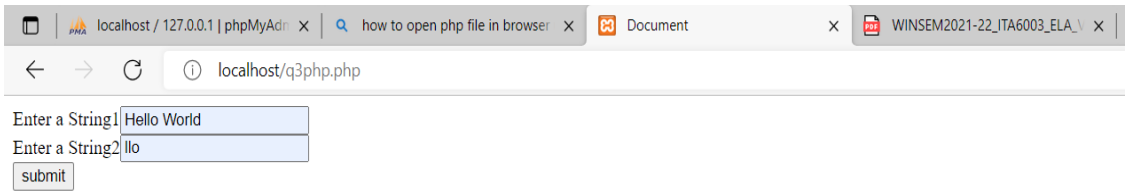


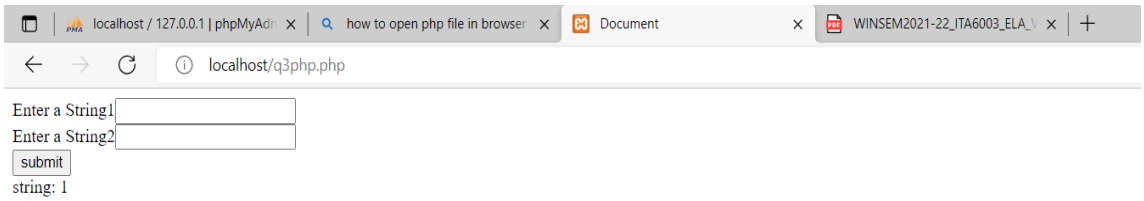


Q3 Write a PHP script to count the number of occurrences of a particular substring pattern in a given sentence.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
</head>
<body>
<form action="q3php.php" name="f1" method="POST">
Enter a String1<input type="text" name="string1"><br>
Enter a String2<input type="text" name="string2"><br>
<input type="submit" value="submit" name="submit">
</form>
<?php
extract($_POST);
if(isset($submit))
{
$a=$string1;
$c=$string2;
$b=substr_count($a,$c);
echo "string: $b";
}
?>
</body>
</html
```

Output:



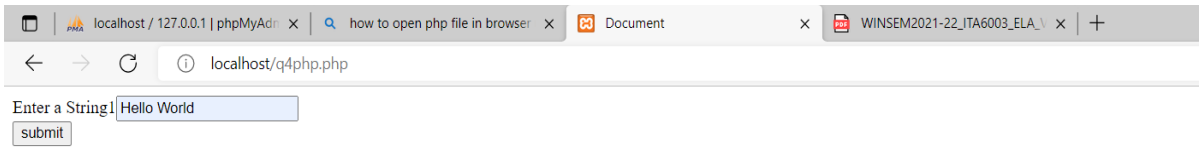


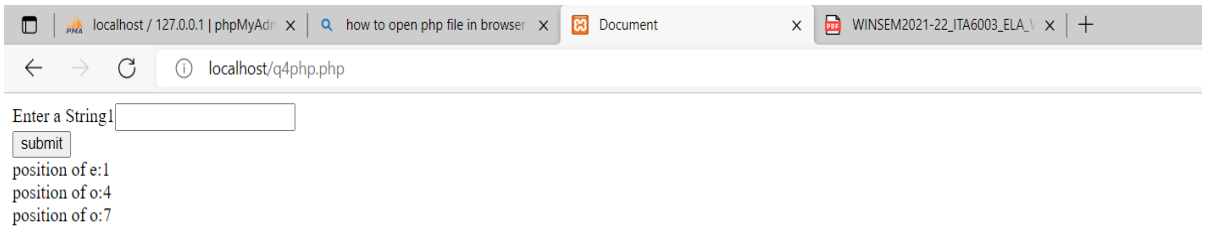
Q4 Write a PHP script to print the position of vowel character in a sentence.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
</head>
<body>
<form action="q4php.php" name="f1" method="POST">
Enter a String1<input type="text" name="string1"><br>
<input type="submit" value="submit" name="submit">
</form>
<?php
extract($_POST);
if(isset($submit))
{
$a=$string1;
$b=str_split($a);
for($i=0;$i<count($b);$i++)
{
if($b[$i]=='a' || $b[$i]=='e' || $b[$i]=='i' || $b[$i]=='o' || $b[$i]=='u' )
echo "position of $b[$i]:$i<br>";
}
```

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

Output:





Q5 Write a PHP script to create an associative array having state name as keys and the capital city as values.
a. Display all the keys in an array.
b. Display the capital for the given state.

```
<?php
$arr =
array("Andhra_Pradesh"=>"Heydrabad","Assam"=>"Dispur","Bihar"=>"patna");
foreach($arr as $i => $iv)
{
    echo $i."<br>";
}
echo "CAPITALS"."<br>";
foreach($arr as $i => $iv)
{
    echo $iv."<br>";
}
?>
```

Output:

Andhra_Pradesh
Assam
Bihar
CAPITALS
Heydrabad
Dispur
patna

Q6 6. Test the following array functions for the appropriate array type:
a array_combine ()
b array_count_values()
c array_diff()
d array_diff_assoc()
e array_fill()
f array_flip()
g array_key_exists()
h array_merge()
i array_pop() &array_push()
j array_shift() &array_unshift()
k array_reverse()
l array_search()
m array_slice()
n array_splice()
o array_sum()
p. sort()
q. arsort() &krsoft()
r. asort(), ksort() &rsort()

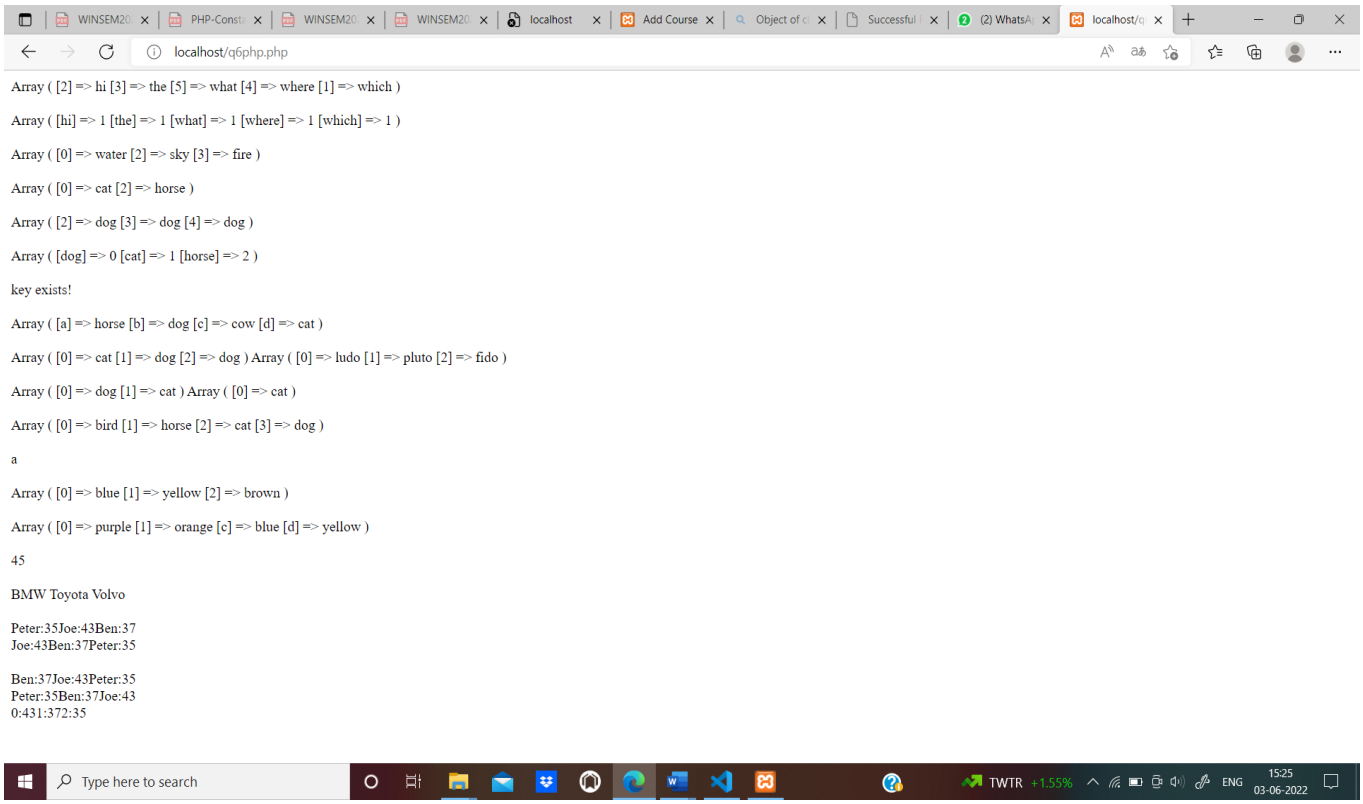
```php
<?php
//a
$a=array(2,3,5,4,1);
$b=array("hi","the","what","where","which");
print_r(array_combine($a,$b));
echo "<br><br>";
//b
$b=array("hi","the","what","where","which");
print_r(array_count_values($b));
echo "<br><br>";

//c
$a=array("water","earth","sky","fire","air");
```

```php
$b=array("hi","earth","mountains","sand","air",);
print_r(array_diff($a,$b));
echo "<br><br>";

//d
$a1=array(0=>"cat",1=>"dog",2=>"horse");
$a2=array(0=>"rat",1=>"horse",2=>"dog");
$a3=array(0=>"horse",1=>"dog",2=>"cat");
print_r(array_diff_assoc($a1,$a2,$a3));
echo "<br><br>";

//e
$a=array_fill(2,3,"dog");
print_r($a);
echo "<br><br>";

//f
$a=array(0=>"dog",1=>"cat",2=>"horse");
print_r(array_flip($a));
echo "<br><br>";

//g
$a=array("a"=>"dog","b"=>"cat");
if(array_key_exists("a",$a))
    echo "key exists!";
else
    echo"key does not exist!";
echo "<br><br>";

//h
$a1=array("a"=>"horse","b"=>"dog");
$a2=array("c"=>"cow","d"=>"cat");
print_r(array_merge($a1,$a2));
echo "<br><br>";

//i
$a1=array("dog","dog","cat"); $a2=array("pluto","fido","ludo");
array_multisort($a1,SORT_ASC,$a2,SORT_DESC);
print_r($a1); print_r($a2);
echo "<br><br>";

//j
$a=array("dog","cat","horse");
array_pop($a); print_r($a);
array_shift($a); print_r($a);
echo "<br><br>";

//k
```

```php
$a=array("dog","cat");
array_push($a,"horse","bird");
print_r(array_reverse($a));
echo "<br><br>";

//l
$a=array("a"=>"red","b"=>"green","c"=>"blue");
echo array_search("red",$a);
echo "<br><br>";

//m
$a=array("red","green","blue","yellow","brown");
print_r(array_slice($a,2));
echo "<br><br>";

//n
$a1=array("a"=>"red","b"=>"green","c"=>"blue","d"=>"yellow");
$a2=array("a"=>"purple","b"=>"orange");
array_splice($a1,0,2,$a2);
print_r($a1);
echo "<br><br>";

//o
$a=array(5,15,25);
echo array_sum($a);
echo "<br><br>";

//p
$cars=array("Volvo","BMW","Toyota");
sort($cars);
foreach($cars as $x)
{
    echo $x." ";
}
echo "<br><br>";

//q
$age=array("Peter"=>"35","Ben"=>"37","Joe"=>"43");
krsort($age);
foreach($age as $x=>$val)
{
    echo $x.":".$val;
}
echo "<br>";
arsort($age);
foreach($age as $x=>$val)
{
    echo $x.":".$val;
```

```php
}
echo "<br><br>";

//r
$age=array("Peter"=>"35","Ben"=>"37","Joe"=>"43");
ksort($age);
foreach($age as $x=>$val)
{
    echo $x.":".$val;
}
echo "<br>";
asort($age);
foreach($age as $x=>$val)
{
    echo $x.":".$val;
}
echo "<br>";
rsort($age);
foreach($age as $x=>$val)
{
    echo $x.":".$val;
}
echo "<br>";
?>
```

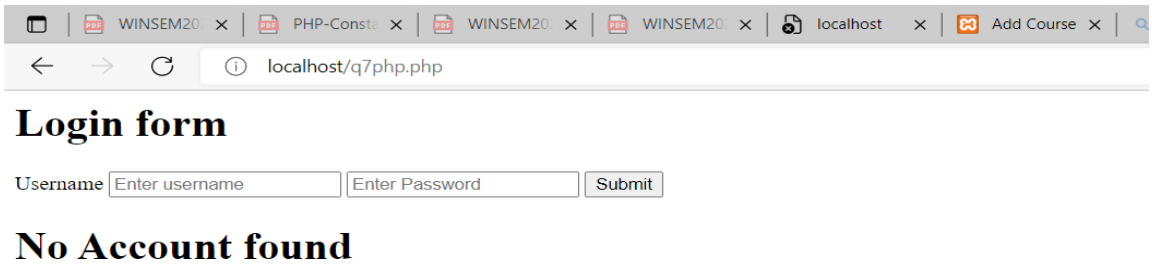
Output:

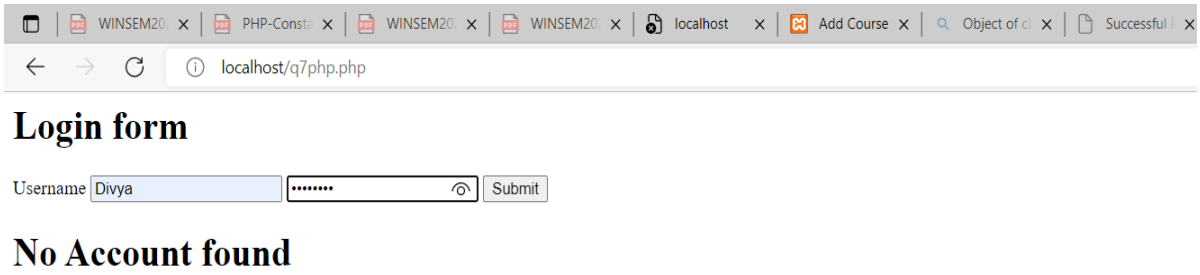


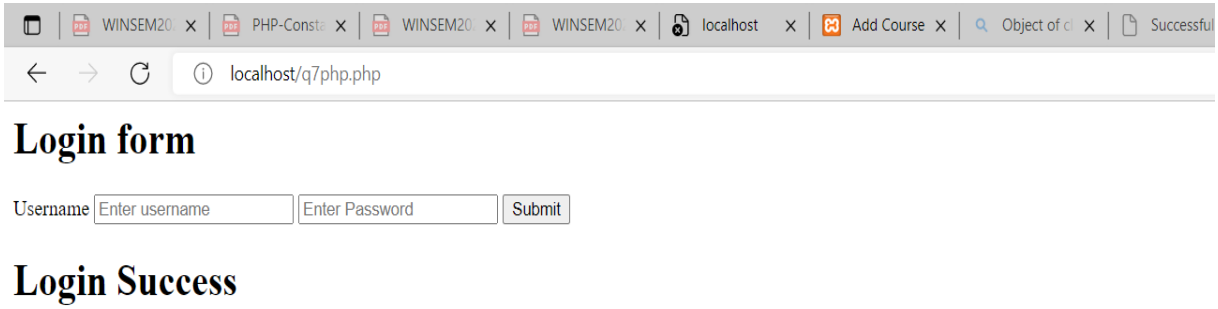
Q7Design the HTML form prompting user to enter username and password. On submission the PHP script should validate the credentials against the list of usernames and password populated in an associative array.

```
<html>
<head>
</head>
<body>
    <h1>Login form</h1>
    <form method="POST" action="<?php echo
htmlspecialchars($_SERVER["PHP_SELF"]); ?>">
        <label>Username</label>
        <input type="text" id="name" name="name" placeholder="Enter username"
/>
        <input type="password" id="pass" name="pass" placeholder="Enter
Password" />
        <input type="submit" value="Submit" />
    </form>

    <?php
    $cred = array("Divya" => "divya123", "Vidushi" => "vidushi123", "Ankita"
=> "ankita123");
    function testdata($data)
    {
        $data = trim($data);
        $data = stripslashes($data);
        $data = htmlspecialchars($data);
        return $data;
    }
    $name = "";
    $pass = "";
    $flag = 0;
    if ($_SERVER["REQUEST_METHOD"] == "POST") {
        $name = testdata($_POST["name"]);
        $pass = testdata($_POST["pass"]);
        foreach ($cred as $i => $iv) {
            if ($name === $i && $pass === $iv) {
                echo "<h1>Login Success</h1>";
                $flag = 1;
                break;
            }
        }
    }
    if ($flag == 0) {
        echo "<h1>No Account found</h1>";
    }
    ?>
</body>
</html>
```

Output:





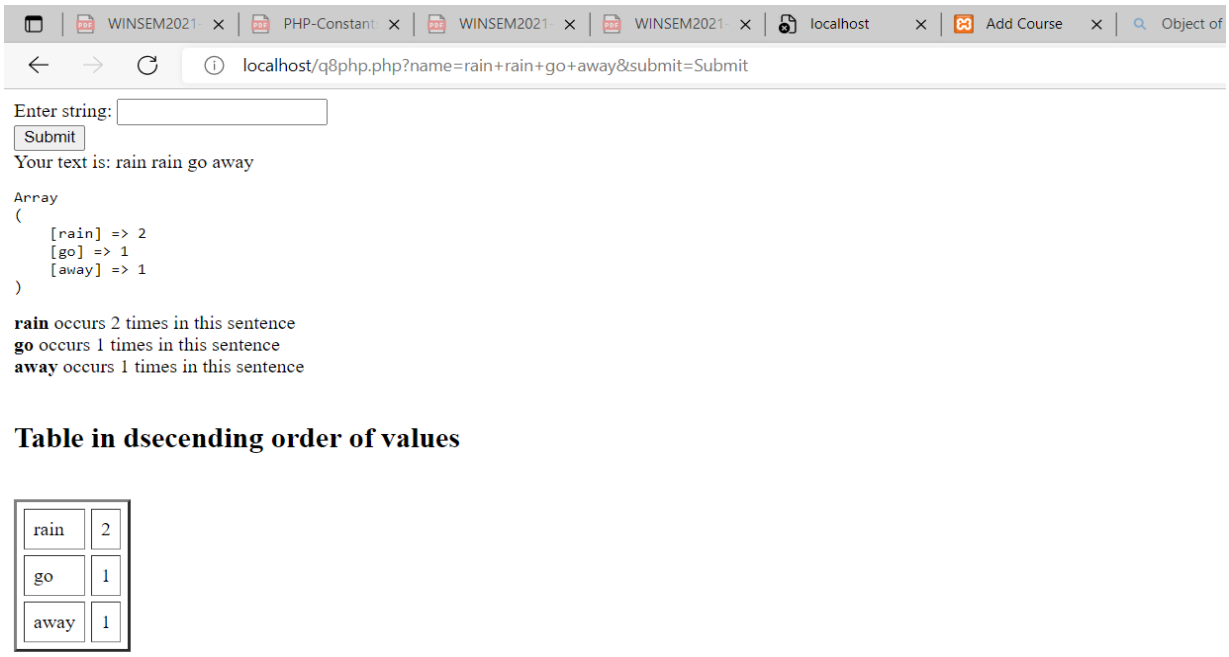


Q8 Write a PHP form consisting of a single text field and a submit button. The “action” attribute of the form should be the same page that the form is on. The form should send the contents of the text field via GET. Upon submitting the form, you should be redirected to the same page, but the URL should contain the string from the text field as a GET request normally behaves. Check for the existence of a GET request. If a GET request exists with the name of the input field, run the contents of the request through countWords ($str) PHP function. That takes any string of characters and finds

the number of times each word occurs, its position and length. Take the output and display of an HTML table of words, the number of times they occur, its position and its length. Make the table sorted by decreasing number of occurrences.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
<form action="q8php.php" method="GET">
<label for="name">Enter string:</label>
<input id="name" type="text" name="name">
<br>
<input type="submit" name="submit" value="Submit">
</form>
<?php
extract($_GET);
if (isset($submit)){
$a=$name;
echo "Your text is: ".$a."<br>";
$wordsArr = explode(' ', $a);
        $vals = array_count_values($wordsArr);

        echo "<pre>";
        print_r($vals);
        echo "</pre>";
        arsort($vals);
        foreach ($vals as $key => $value)
        {
            echo "<b>" . $key . "</b> occurs " . $value . " times in this
sentence <br/>";
        }
        echo "<br><h2>Table in dsecending order of values</h2><br><table
border='3' cellspacing='5' cellpadding='7'>";
        foreach ($vals as $key => $value)
        {
            echo "<tr><td>" . $key . "</td><td> " . $value . "</td></tr>";
        }
}

?>

</body>
</html>
```

Output:

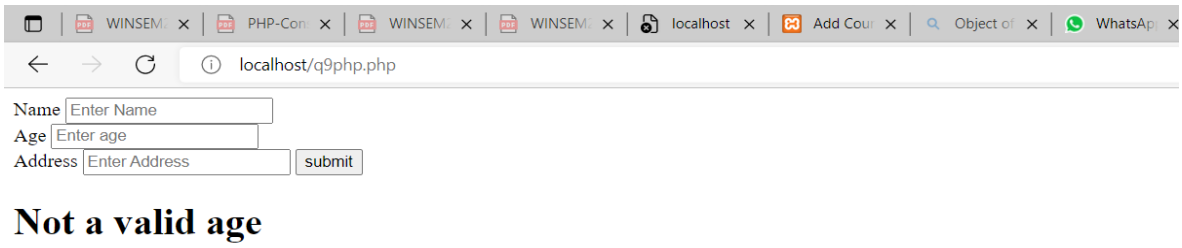


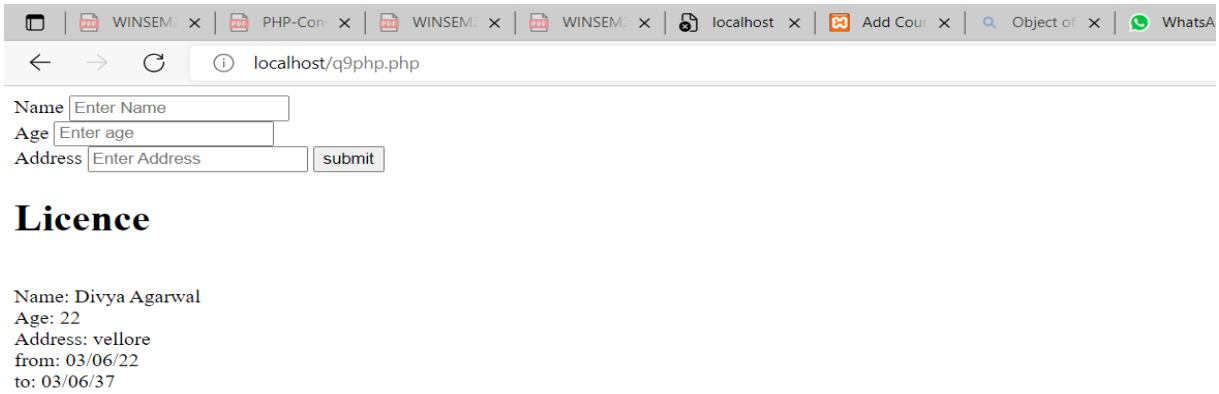
Q9 . Design a PHP form for online driving license issue. Consider the fields- Name, Age and Address (text boxes). If the age is less than 18, issue an error message. Otherwise compute the expiry date [Today's date+ 15years] of the license. Assume that the validity of the driving license is for 15 years. Display the license with details using PHP.

```
<form method="POST" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);
?>">
    <label>Name</label>
    <input type="text" name="name" placeholder="Enter Name"/><br>
    <label>Age</label>
    <input type="text" name="age" placeholder="Enter age"/><br>
    <label>Address</label>
    <input type="text" name="address" placeholder="Enter Address"/>
    <input type="submit" value="submit"/>
</form>

<?php
function testdata($data)
{
    $data = trim($data);
    $data = htmlspecialchars($data);
    $data = stripslashes($data);
    return $data;
}
```

```php
$name = $address = "";
$age = 0;
if($_SERVER["REQUEST_METHOD"] == "POST")
{
    $name = testdata($_POST["name"]);
    $age = (int)testdata($_POST["age"]);
    $address = testdata($_POST["address"]);
}
if($age < 18)
{
    echo "<h1>Not a valid age</h1>";
}
else
{
    $today = date("d/m/y");
    $valid_date = date("d/m/y",strtotime('+ 15 years'));
    echo "<h1>Licence</h1><br>";
    echo "Name: ".$name."<br>";
    echo "Age: ".$age."<br>";
    echo "Address: ".$address."<br>";
    echo "from: ".$today."<br>";
    echo "to: ".$valid_date."<br>";

}
```

Output:



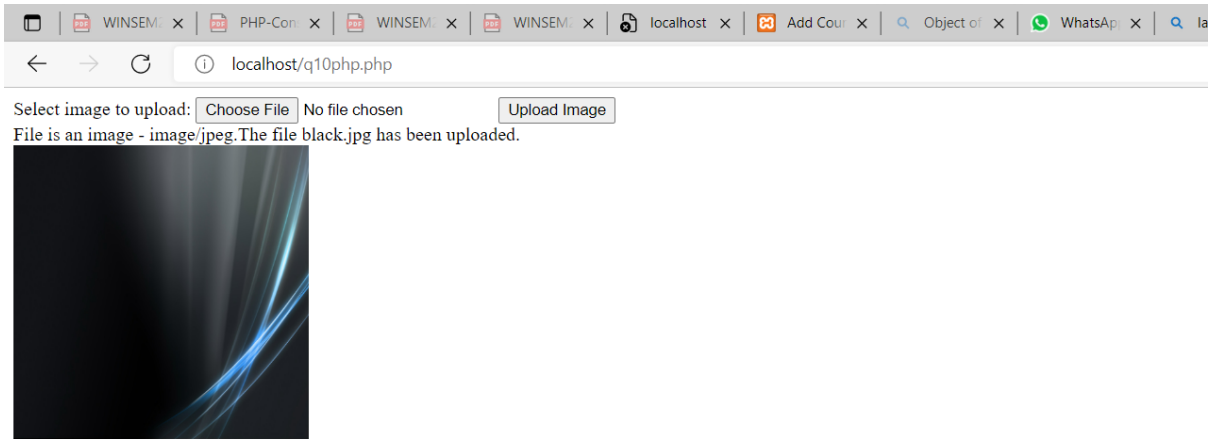


Q10 Write a pair of pages that work together to allow the user to upload an image, img_upload.html and img_submit.php. img_upload.html should be a full and wellformed html page containing a form with a file upload input and a submit button.
When the user submits the form, it should post the form to img_submit.php, located in the same directory.
When the user posts a file to img_submit.php, your program should check to see whether the filename of the file that was given ends in .jpg or .gif.
If it doesn't, the page should respond with HTTP/1.1 status code 400, and then die() with an error message describing the problem. You should save the file by moving it into the same directory as your program, saving the image as the original filename that was given by the POST request. Then, it should render a complete HTML document with the image in the document as an img element. The alt text of the img should be "user uploaded image".
Error handling: if the file fails the is_uploaded_file check, or if the filename of the file that the user uploaded doesn't end with .jpg or .gif, you should respond with a header that indicates a status code of 400, and die() with an appropriate error message.

```
<!DOCTYPE html>
<html>
<body>

<form action="q10php.php" method="post" enctype="multipart/form-data">
  Select image to upload:
  <input type="file" name="fileToUpload" id="fileToUpload">
  <input type="submit" value="Upload Image" name="submit">
</form>
<?php
$target_dir = "./";
$target_file = $target_dir . basename($_FILES["fileToUpload"]["name"]);
$uploadOk = 1;
$imageFileType = strtolower(pathinfo($target_file,PATHINFO_EXTENSION));

if(isset($_POST["submit"])) {
  $check = getimagesize($_FILES["fileToUpload"]["tmp_name"]);
  if($check !== false) {
    echo "File is an image - " . $check["mime"] . ".";
    $uploadOk = 1;
```

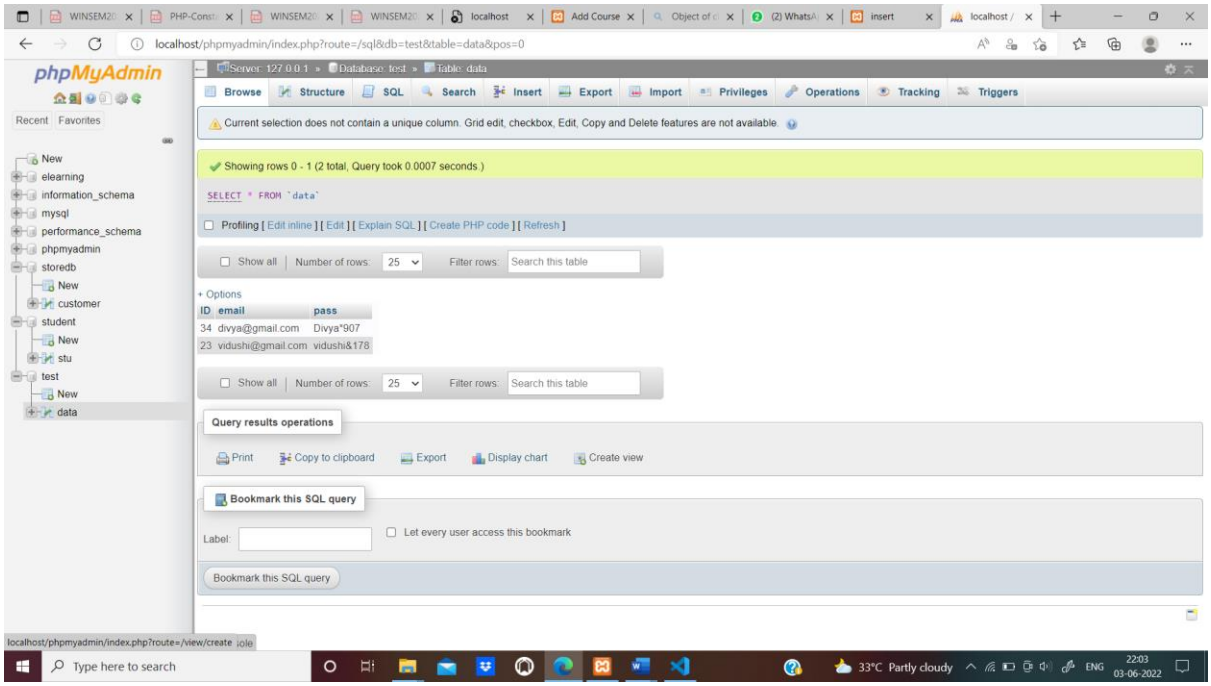
```
  } else {
    echo "File is not an image.";
    $uploadOk = 0;
  }
}
if ($_FILES["fileToUpload"]["size"] > 500000) {
  echo "Sorry, your file is too large.";
  $uploadOk = 0;
}

if($imageFileType != "jpg" && $imageFileType != "png" && $imageFileType !=
"jpeg"
&& $imageFileType != "gif" ) {
  echo "Sorry, only JPG, JPEG, PNG & GIF files are allowed.";
  $uploadOk = 0;
}

if ($uploadOk == 0) {
  echo "Sorry, your file was not uploaded.";
} else {
  if (move_uploaded_file($_FILES["fileToUpload"]["tmp_name"], $target_file)) {
    echo "The file ". htmlspecialchars( basename(
$_FILES["fileToUpload"]["name"])). " has been uploaded."."<br>";
  } else {
    header("http/1.1 400 bad request");
    die("Failed to upload");
  }
}
?>
<html>
    <head></head>
    <body>
        <img src="<?= $target_file ?>" alt="image" width="250" height="250"/>
    </body>
</html>

</body>
</html>
```

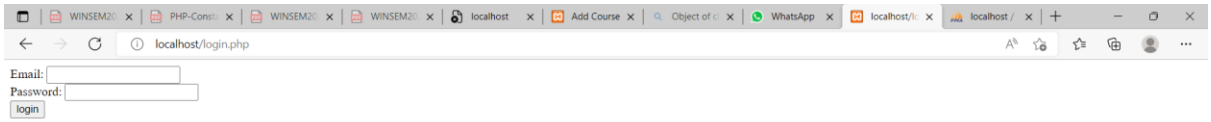
Output:

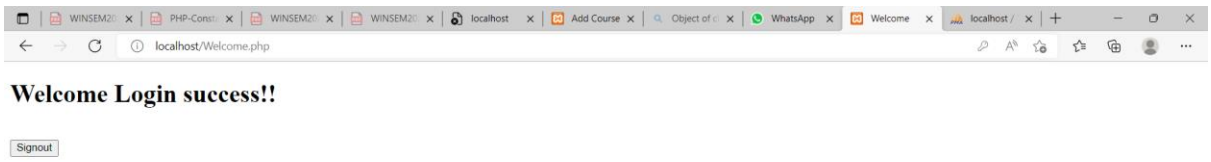


Q11 **.** Write a PHP file that will output a form containing two fields: username and password. Upon submission of the form, the code should check against the database to see whether the username password pair was correct. If so, display a welcome message. If not, display the message “Invalid username or password” followed by the same login form. Add a “Log Out” button to the welcome message that, when clicked, ends the session so that the user is logged out. Clicking the button should redirect the user to the same login form. This behavior should be consistent with the lifetime of sessions. That is, the user should stay logged in despite refreshing and opening the same page in multiple tabs, but should be logged out once the browser is closed.

Output:







Q12 Write MySQL DDL command to create database called ***MS_2019_<yourregister-number>*** and ***student*** table with the following fields:***student_ID*** of integer type and null values not permitted,***name*** of string type and null values not permitted, ***major*** of string type, ***total*** of integer type and ***grade*** of string type.

a. Display table structure

b. Insert 10 records into the student table.

c. Using ***ALTER***add primary key field.

d. Fire **UPDATE** query to set grade as “B’ for those student who got total >500

e. Test **DELETE** query for deleting records of ‘CSE’ major type.

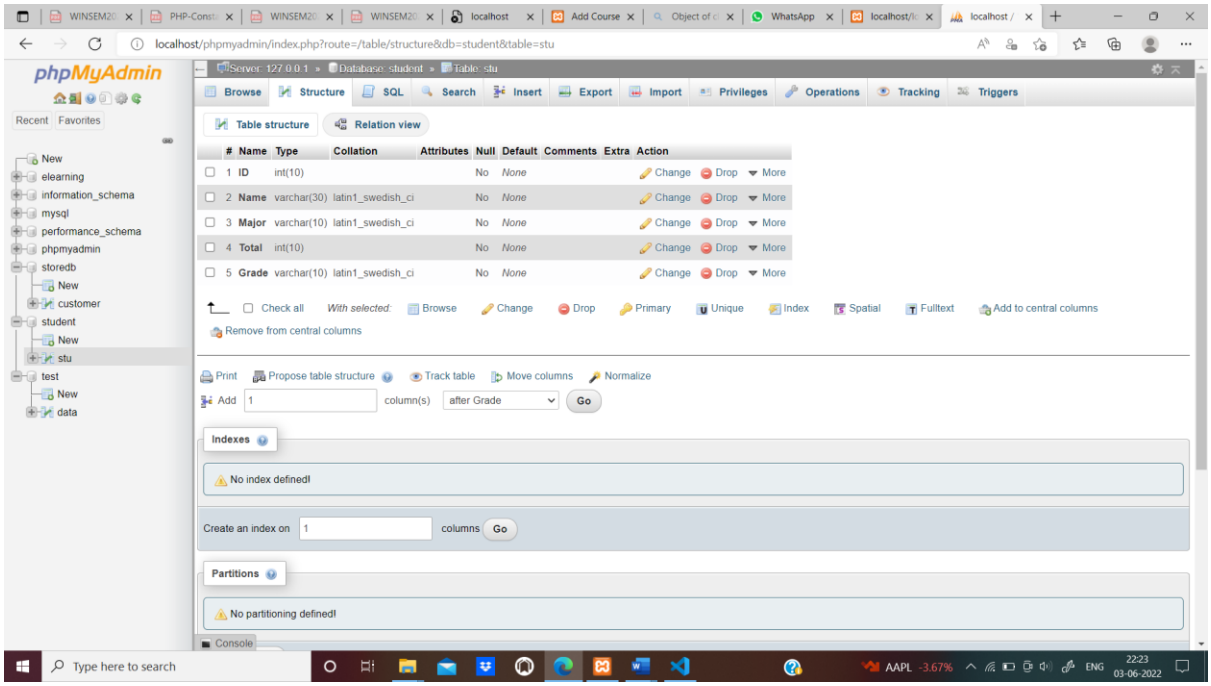
f. Display the count of number of students having “IT’ major.

g. Display the IT major students in descending order.

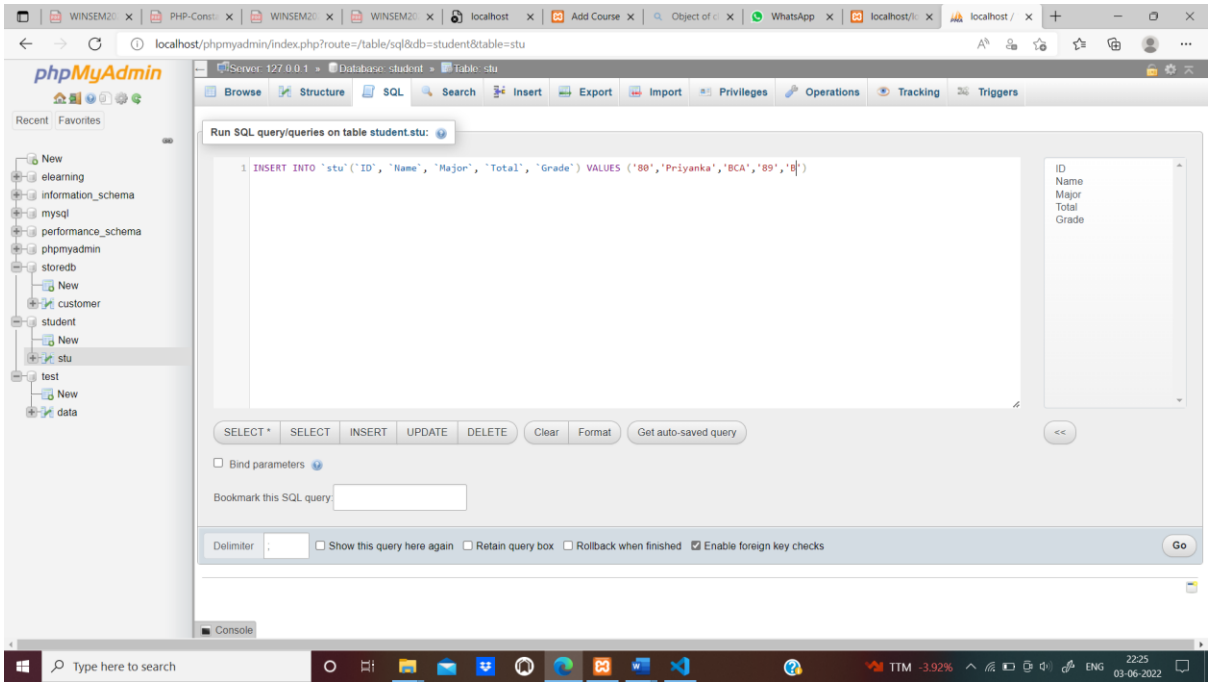
h. Display those student names starting with ‘P’.

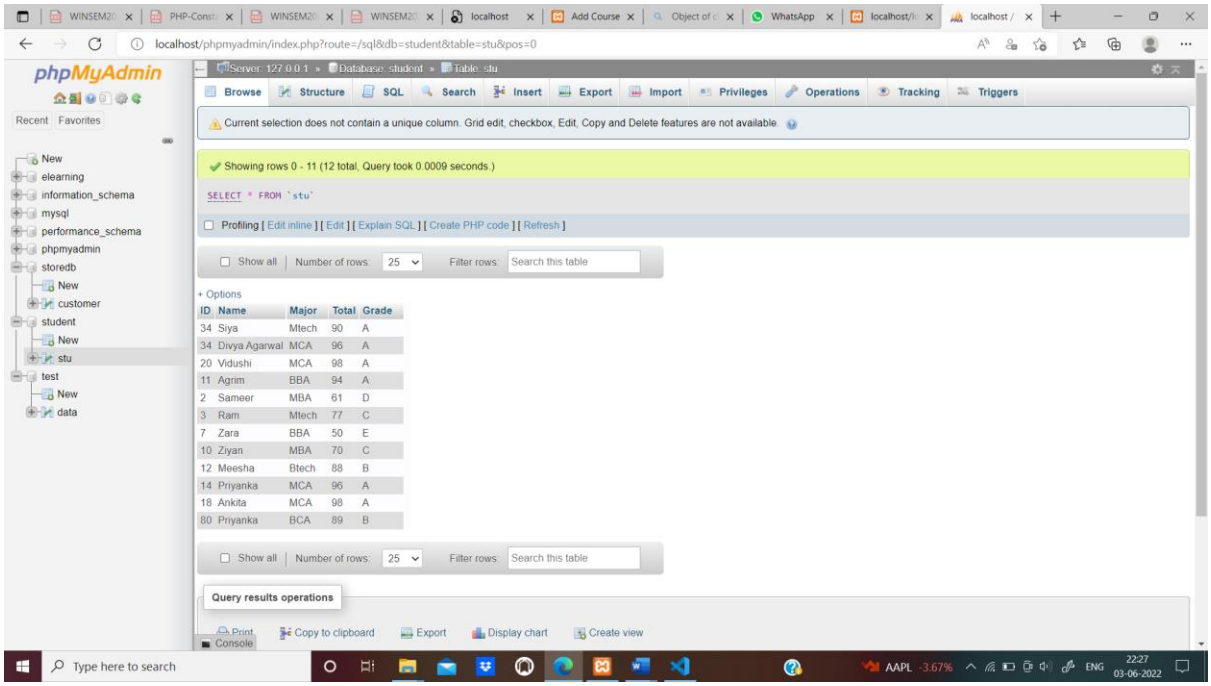
i. Using **GROUP BY**display the number of students in each major.

a)

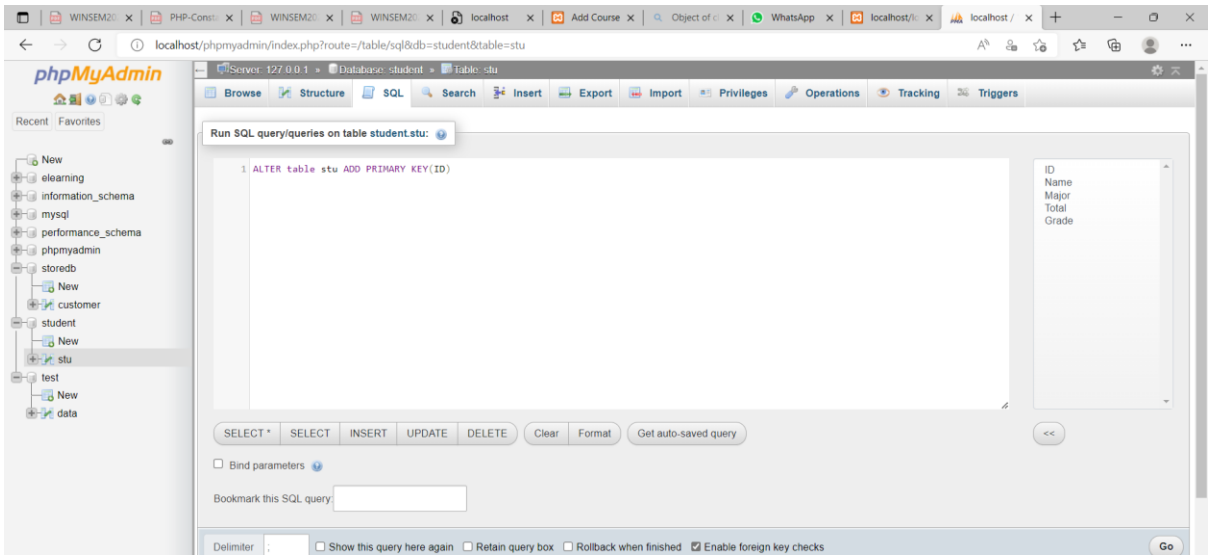


b)

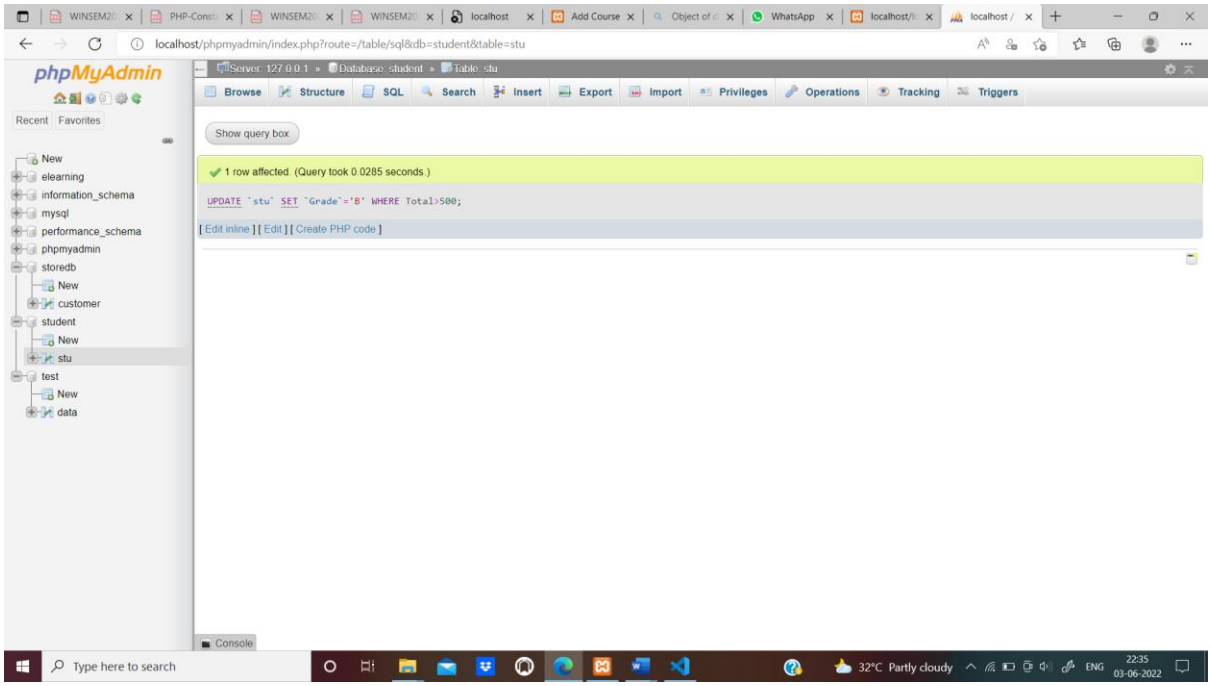



phpMyAdmin
localhost/phpmyadmin/index.php?route=/sql&db=student&table=stu&pos=0
Server: 127.0.0.1 » Database: student » Table: stu
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Showing rows 0 - 11 (12 total, Query took 0.0009 seconds.)
SELECT * FROM `stu`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 | Filter rows: Search this table
+ Options
ID Name Major Total Grade
34 Siya Mtech 90 A
34 Divya Agarwal MCA 96 A
20 Vidushi MCA 98 A
11 Agrim BBA 94 A
2 Sameer MBA 61 D
3 Ram Mtech 77 C
7 Zara BBA 50 E
10 Ziyan MBA 70 C
12 Meesha Btech 88 B
14 Priyanka MCA 96 A
18 Ankita MCA 98 A
80 Priyanka BCA 89 B
Query results operations
Print Copy to clipboard Export Display chart Create view
Console
Type here to search
22:27
03-06-2022

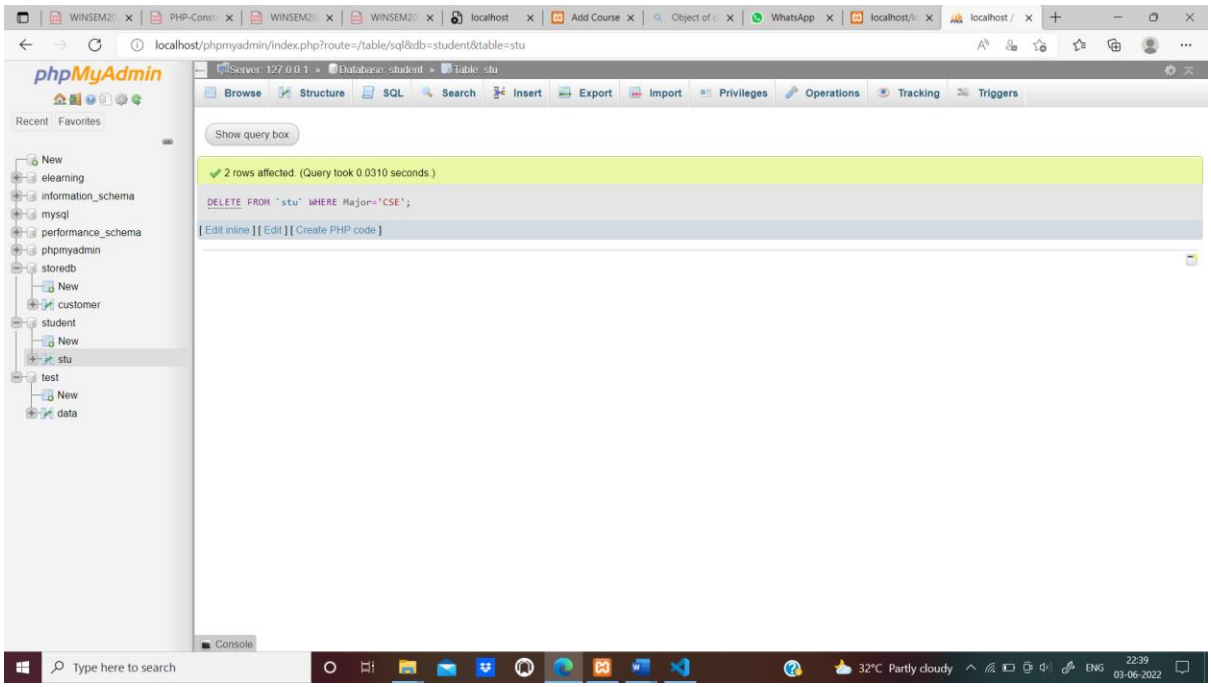
c)


phpMyAdmin
localhost/phpmyadmin/index.php?route=/table/sql&db=student&table=stu
Server: 127.0.0.1 » Database: student » Table: stu
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Run SQL query/queries on table student.stu:
1 ALTER table stu ADD PRIMARY KEY(ID)
ID
Name
Major
Total
Grade
SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query
Bind parameters
Bookmark this SQL query:
Delimiter ; Show this query here again Retain query box Rollback when finished Enable foreign key checks
Go

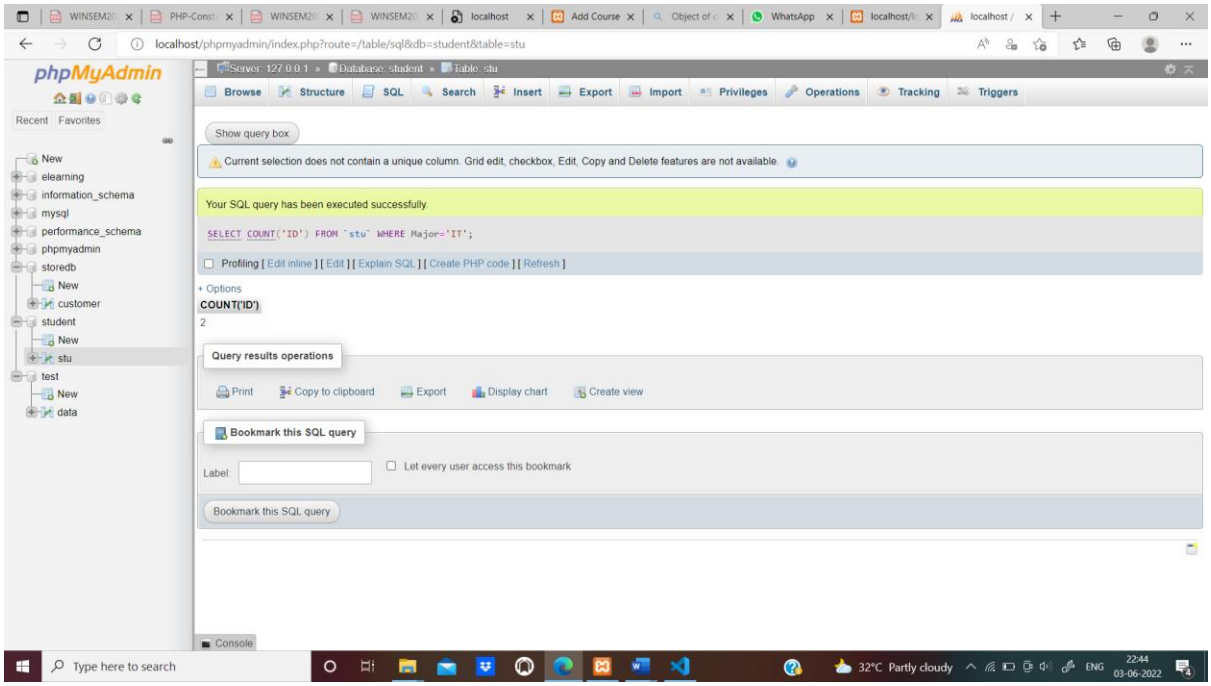
d)


phpMyAdmin
Recent Favorites
New
elearning
information_schema
mysql
performance_schema
phpmyadmin
storedb
New
customer
student
New
stu
test
New
data
Server: 127.0.0.1 » Database: student » Table: stu
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Show query box
1 row affected. (Query took 0.0285 seconds.)
UPDATE `stu` SET `Grade`='B' WHERE Total>500;
[Edit inline] [Edit] [Create PHP code]
Console
Type here to search
32°C Partly cloudy
ENG
22:35
03-06-2022

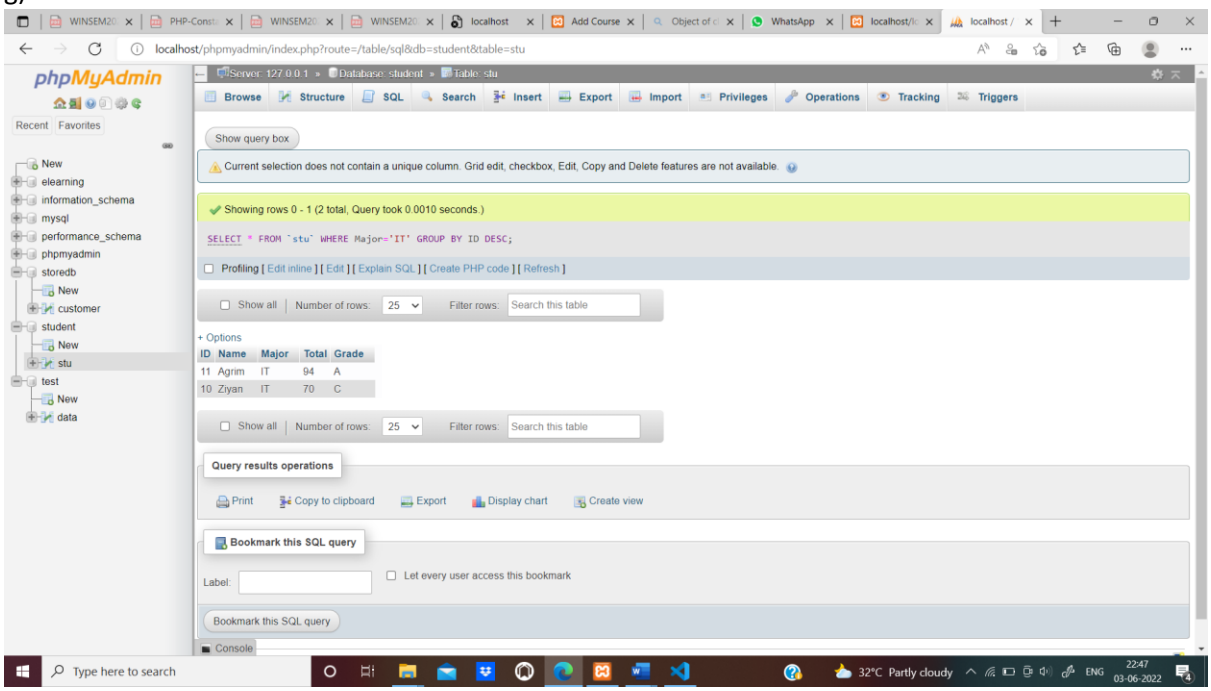
e)


phpMyAdmin
Recent Favorites
New
elearning
information_schema
mysql
performance_schema
phpmyadmin
storedb
New
customer
student
New
stu
test
New
data
Server: 127.0.0.1 » Database: student » Table: stu
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Show query box
2 rows affected. (Query took 0.0310 seconds.)
DELETE FROM `stu` WHERE Major='CSE';
[Edit inline] [Edit] [Create PHP code]
Console
Type here to search
32°C Partly cloudy
ENG
22:39
03-06-2022

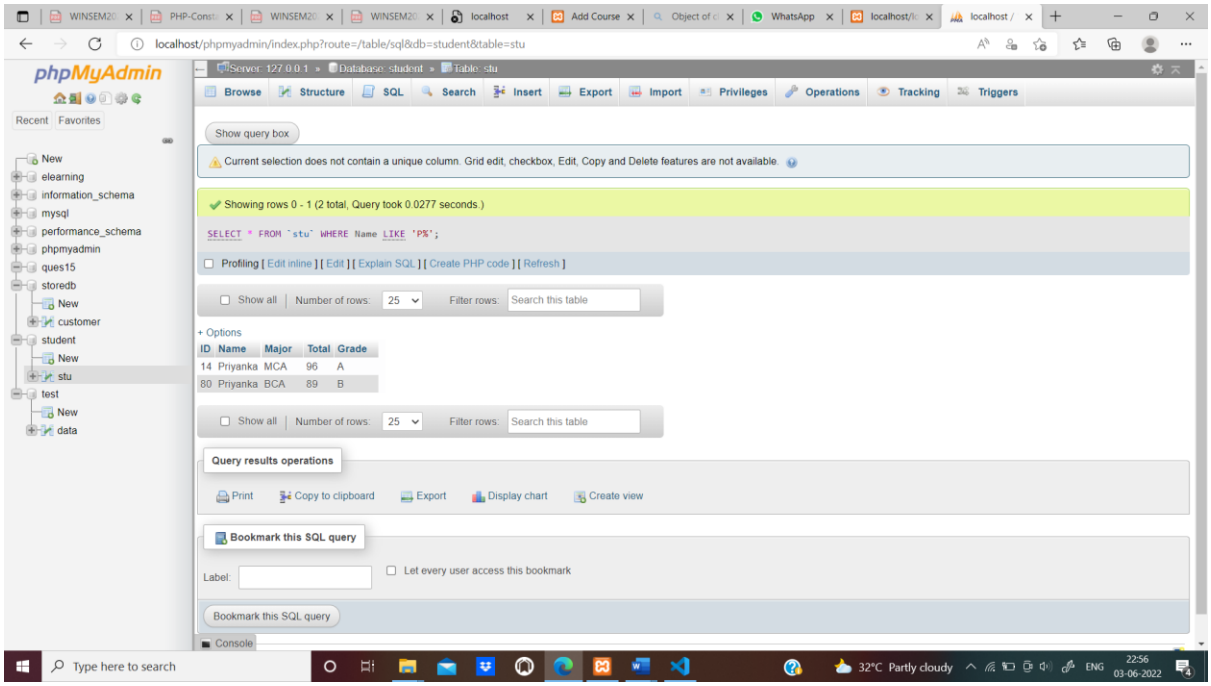
f)


localhost/phpmyadmin/index.php?route=/table/sql&db=student&table=stu
phpMyAdmin
Server: 127.0.0.1 » Database: student » Table: stu
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Show query box
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Your SQL query has been executed successfully.
SELECT COUNT('ID') FROM `stu` WHERE Major='IT';
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
+ Options
COUNT('ID')
2
Query results operations
Print Copy to clipboard Export Display chart Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Bookmark this SQL query
Console
Type here to search
32°C Partly cloudy
ENG
22:44
03-06-2022

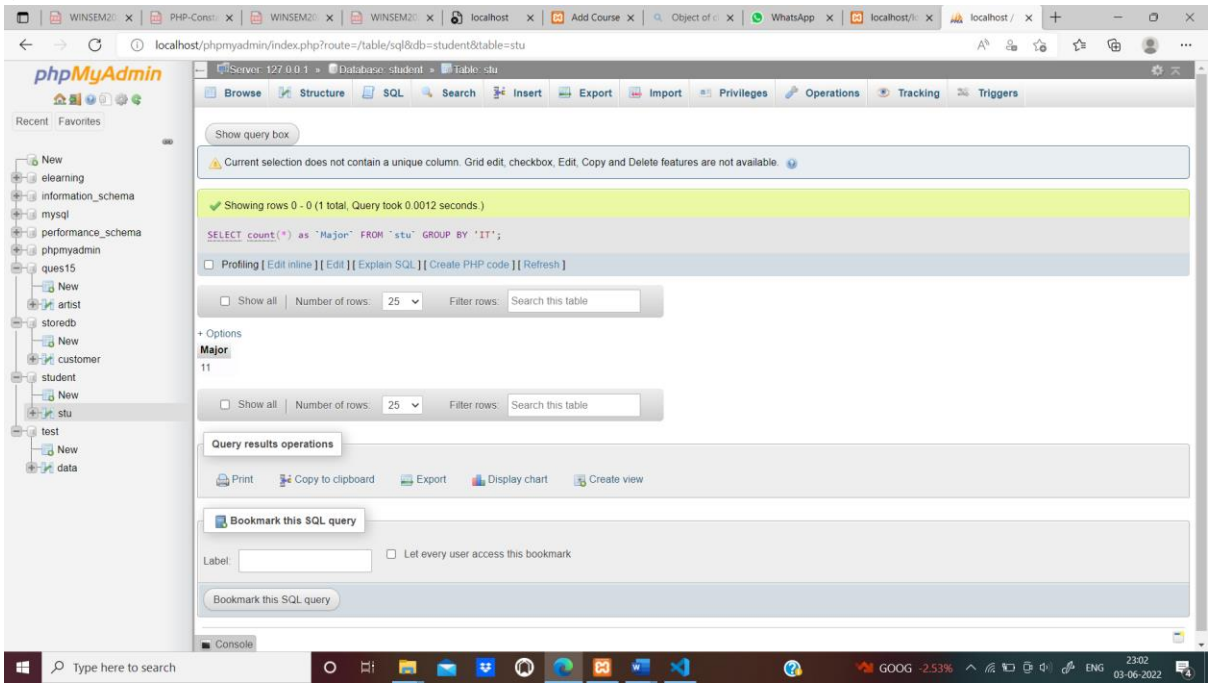
g)


localhost/phpmyadmin/index.php?route=/table/sql&db=student&table=stu
phpMyAdmin
Server: 127.0.0.1 » Database: student » Table: stu
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Show query box
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Showing rows 0 - 1 (2 total, Query took 0.0010 seconds.)
SELECT * FROM `stu` WHERE Major='IT' GROUP BY ID DESC;
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all Number of rows: 25 Filter rows: Search this table
+ Options
ID Name Major Total Grade
11 Agrim IT 94 A
10 Ziyan IT 70 C
Query results operations
Print Copy to clipboard Export Display chart Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Bookmark this SQL query
Console
Type here to search
32°C Partly cloudy
ENG
22:47
03-06-2022

h)



i)



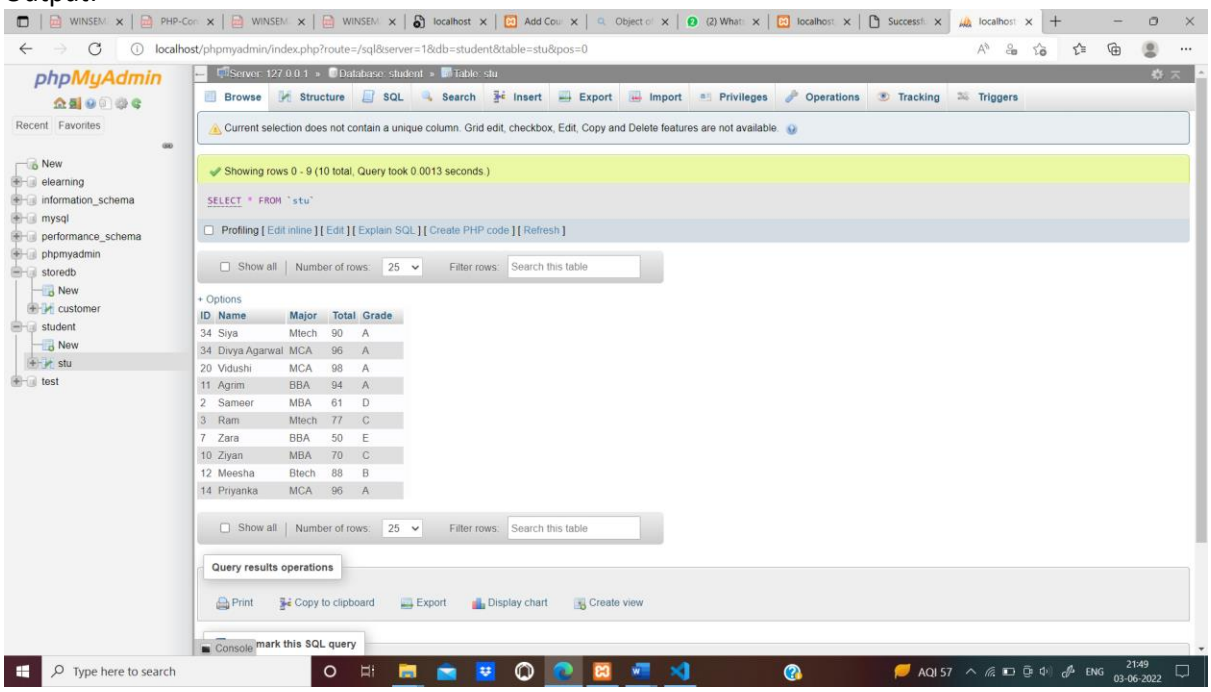
Q13Design the PHP page to insert the details like student Id, name, major, total and grade into the student table.

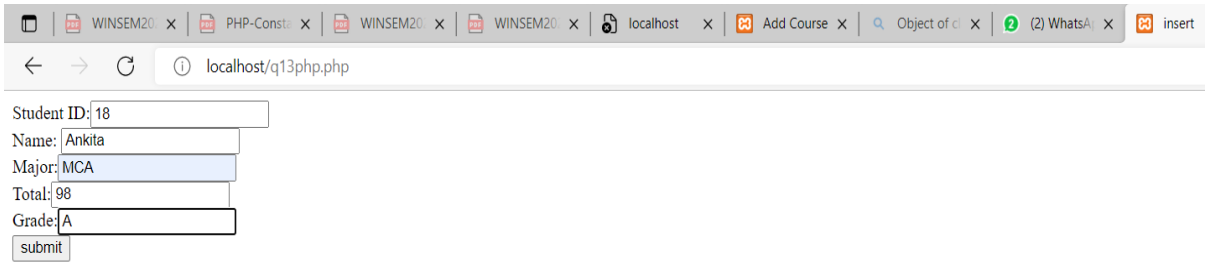
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>insert</title>
```

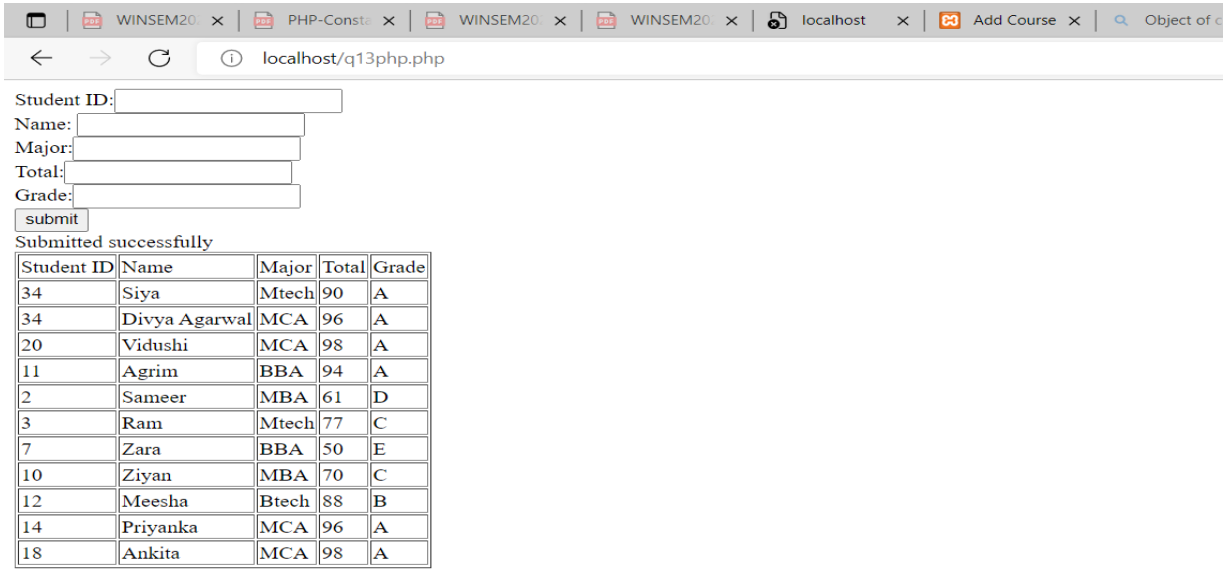
```
</head>
<body>
    <form method="POST" action="q13php.php">
       Student ID:<input type="text" name="id"><br>
       Name: <input type="text" name="sname"><br>
       Major:<input type="text" name="major"><br>
       Total:<input type="text" name="total"><br>
       Grade:<input type="text" name="grade"><br>
       <input type="submit" value="submit" name="submit"><br>
    </form>
    <?php
    extract($_POST);
    if(isset($submit))
    {
        if(empty($id))
          echo ("ID should not be NULL");
        else if(empty($sname))
          echo ("Name should not be NULL");
          $con=mysqli_connect("localhost","root","");
          $dbname="student";
          mysqli_select_db($con,$dbname);
          $query="insert into stu (ID,Name,Major,Total,Grade) values
($id,'$sname','$major',$total,'$grade')";
          $result=mysqli_query($con,$query);
          if($result)
          {
            echo ("Submitted successfully");
            $res=mysqli_query($con,"select * from stu");
            $c=mysqli_num_rows($res);
            if($c>0)
            {
    ?>
              <table border=1>
                <tr>
                  <td>Student ID</td>
                  <td>Name</td>
                  <td>Major</td>
                  <td>Total</td>
                  <td>Grade</td>
                </tr>
              <?php
              $i=0;
              while($row=mysqli_fetch_assoc($res))
              {
              ?>
                <tr>
                  <td><?php echo $row["ID"]; ?></td>
                  <td><?php echo $row["Name"]; ?></td>
```

```
                    <td><?php echo $row["Major"]; ?></td>
                    <td><?php echo $row["Total"]; ?></td>
                    <td><?php echo $row["Grade"]; ?></td>
                </tr>
                <?php
                $i++;
            }
        }
        ?>
        </table>
    <?php
        }
        //mysqli_fetch_assoc($result);
        mysqli_close($con);
    }

    ?>
</body>
</html>
```

Output:







Student ID	Name	Major	Total	Grade
34	Siya	Mtech	90	A
34	Divya Agarwal	MCA	96	A
20	Vidushi	MCA	98	A
11	Agrim	BBA	94	A
2	Sameer	MBA	61	D
3	Ram	Mtech	77	C
7	Zara	BBA	50	E
10	Ziyan	MBA	70	C
12	Meesha	Btech	88	B
14	Priyanka	MCA	96	A
18	Ankita	MCA	98	A

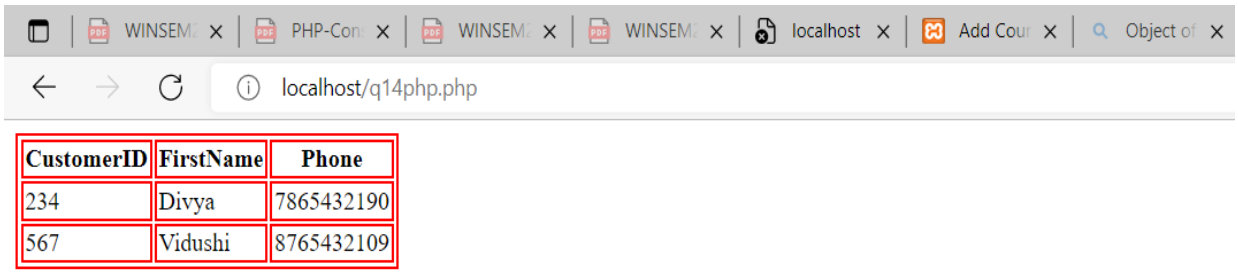
Q14 Provided below is the MySQL table structure for the StoreDB database.

Develop a PHP script to display the customer ID, first name and mobile number of those customers whose reward points are more than 500 in HTML table format

```php
<?php
    $user = "root";
    $dbname = "storedb";
    $pass = "";
    $conn = new mysqli("localhost", $user, $pass, $dbname);
    echo"<style>
        table,tr,th,td
        {
            border: 2px solid red;
        }
        </style>";
    if ($conn->connect_error) {
        die("Failed to Connect");
```

```
    } else {
        $sql = "select customerID,firstname,phone from customer where
rewardpoint>500";
        $res = $conn->query($sql);
        echo "<table>
                <tr>
                <th>CustomerID</th>
                <th>FirstName</th>
                <th>Phone</th>
                </tr>";
        if ($res->num_rows > 0) {
            while ($row = $res->fetch_assoc()) {
                echo "<tr>
                    <td>{$row["customerID"]}</td>
                    <td>{$row["firstname"]}</td>
                    <td>{$row["phone"]}</td>
                    </tr>";
            }
        }
        echo "</table>";
        mysqli_close($conn);
    }
```

Output:



CustomerID	FirstName	Phone
234	Divya	7865432190
567	Vidushi	8765432109

Q15 . Create a database with mysql tables - Artist and CD as follows:
Write the necessary code into *dbconnect.php* for connecting server,connecting database and selecting database. Write the index.php that
i. Connect to mysql by including *dbconnect.php* inside your *index.php*.
ii. to insert records in the two tables as shown above.
iii. to output a list of "cdTitle, cdGenre" pairs, separated by a comma.
iv. to output an HTML table to hold the information produced by this query "SELECT artName, cdTitle, cdGenre, cdRating, cdYear FROM Artist NATURAL JOIN CD".

v. to output a table to provide a list of artist names along with the average rating of their albums, and their nationality. The web page output should look something like this:
vi. to colour the ratings using the rules below:

```php
<?php
$user = "root";
$dbname = "ques15";
$pass = "";
$conn = new mysqli("localhost",$user,$pass,$dbname);
session_start();
$_SESSION["con"] = $conn;
if($conn->connect_error)
{
    die("Failed to connect");
    mysqli_close($conn);
}
?>
```

```php
<?php
include "dbconnect.php";
echo "<style>
    .poorrating
    {
        color:red;
    }
    .okrating
    {
        color:orange;
    }
    .goodrating
    {
        color:yellow;
    }
    .greatrating
    {
        color:green;
    }
    </style>";
// i
function insert_artist($artname,$artnationality)
{
    $sql = "insert into artist(artName,artNationality) values
('{$artname}','{$artnationality}');";
    if(mysqli_query($_SESSION["con"],$sql))
    {
```

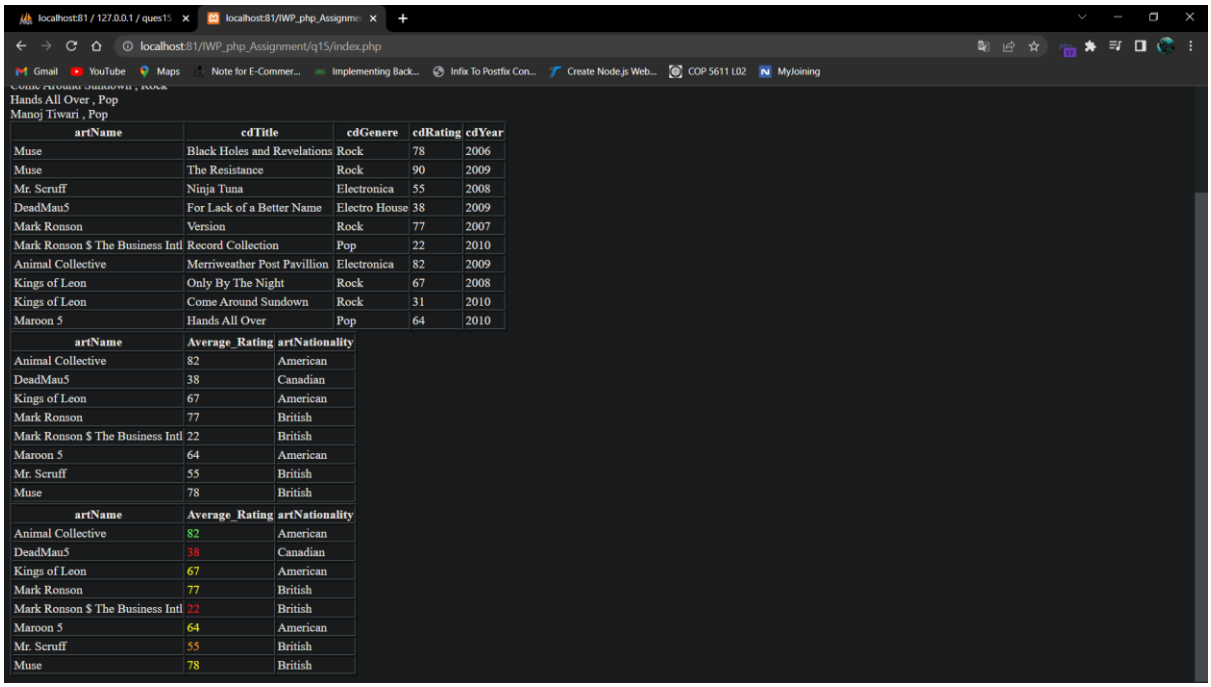
```
        echo "Data Inserted in artist";
    }
    else
    {
        die("Failed to insert");
        mysqli_close($_SESSION["con"]);
    }
}
// ii
function insert_cd($artID,$cdTitle,$cdPrice,$cdGenere,$cdRating,$cdYear)
{
    $sql = "insert into cd(artID,cdTitle,cdPrice,cdGenere,cdRating,cdYear)
values
({$artID},'{$cdTitle}',{$cdPrice},'{$cdGenere}',{$cdRating},{$cdYear});";
    if(mysqli_query($_SESSION["con"],$sql))
    {
        echo "Data Inserted in CD";
    }
    else
    {
        die("Failed to insert");
        mysqli_close($_SESSION["con"]);
    }
}
// iii
function output_list()
{
    $sql = "select cdTitle,cdGenere from cd";
    $res = $_SESSION["con"]->query($sql);
    if($res->num_rows>0)
    {
        while($row = $res->fetch_assoc())
        {
            echo "{$row["cdTitle"]}" . " , "."{$row["cdGenere"]}"."<br>";
        }
    }
    else
    {
        die("No data Found");
    }
}
//iv
function natural_join()
{
    $sql = "select artName, cdTitle, cdGenere, cdRating, cdYear from artist
natural join cd;";
    $res = $_SESSION["con"]->query($sql);
    echo "<table border=1px>
```

```
        <tr>
        <th>artName</th>
        <th>cdTitle</th>
        <th>cdGenere</th>
        <th>cdRating</th>
        <th>cdYear</th>
        </tr>";
    if($res->num_rows>0)
    {
        while($row = $res->fetch_assoc())
        {
            echo "<tr>
                <td>{$row["artName"]}</td>
                <td>{$row["cdTitle"]}</td>
                <td>{$row["cdGenere"]}</td>
                <td>{$row["cdRating"]}</td>
                <td>{$row["cdYear"]}</td>
                </tr>";
        }
    }
    else
    {
        die("No data found");
    }
    echo "</table>";
}
//v
function average_rating()
{
    $sql = "SELECT artName,cdRating as Average_Rating,artNationality from
cd,artist WHERE cd.artID = artist.artID GROUP by artist.artName;";
    $res = $_SESSION["con"]->query($sql);
    echo "<table border=1>
            <tr>
            <th>artName</th>
            <th>Average_Rating</th>
            <th>artNationality</th>
            </tr>";
        if($res->num_rows>0)
        {
            while($row = $res->fetch_assoc())
            {
                echo "<tr>
                    <td>{$row["artName"]}</td>
                    <td>{$row["Average_Rating"]}</td>
                    <td>{$row["artNationality"]}</td>
                      </tr>";
            }
```

```
        }
        else
        {
            die("data Not found");
        }
        echo "</table>";
}
function coloured_output()
{
    $sql = "SELECT artName,cdRating as Average_Rating,artNationality from
cd,artist WHERE cd.artID = artist.artID GROUP by artist.artName;";
    $res = $_SESSION["con"]->query($sql);
    echo "<table border=1>
            <tr>
            <th>artName</th>
            <th>Average_Rating</th>
            <th>artNationality</th>
            </tr>";
        if($res->num_rows>0)
        {
            while($row = $res->fetch_assoc())
            {
                $class = classname($row["Average_Rating"]);
                echo "<tr>
                    <td>{$row["artName"]}</td>
                    <td class='{$class}'>{$row["Average_Rating"]}</td>
                    <td>{$row["artNationality"]}</td>
                      </tr>";
            }
        }
        else
        {
            die("data Not found");
        }
        echo "</table>";
}
function classname($x)
{
    if($x>=0 && $x<=39)
    {
        return "poorrating";
    }
    if($x>=40 && $x<=59)
    {
        return "okrating";
    }
    if($x>=60 && $x<=79)
    {
```

```
        return "goodrating";
    }
    return "greatrating";

}
insert_artist("Rinkia Ke papa","Indian");
insert_cd(10,"Manoj Tiwari",9.99,"Pop",80,2015);
output_list();
natural_join();
average_rating();
coloured_output();
?>
```

Output:



Hands All Over , Pop
Manoj Tiwari , Pop

artName	cdTitle	cdGenere	cdRating	cdYear
Muse	Black Holes and Revelations	Rock	78	2006
Muse	The Resistance	Rock	90	2009
Mr. Scruff	Ninja Tuna	Electronica	55	2008
DeadMau5	For Lack of a Better Name	Electro House	38	2009
Mark Ronson	Version	Rock	77	2007
Mark Ronson $ The Business Intl	Record Collection	Pop	22	2010
Animal Collective	Merriweather Post Pavillion	Electronica	82	2009
Kings of Leon	Only By The Night	Rock	67	2008
Kings of Leon	Come Around Sundown	Rock	31	2010
Maroon 5	Hands All Over	Pop	64	2010

artName	Average_Rating	artNationality
Animal Collective	82	American
DeadMau5	38	Canadian
Kings of Leon	67	American
Mark Ronson	77	British
Mark Ronson $ The Business Intl	22	British
Maroon 5	64	American
Mr. Scruff	55	British
Muse	78	British

artName	Average_Rating	artNationality
Animal Collective	82	American
DeadMau5	38	Canadian
Kings of Leon	67	American
Mark Ronson	77	British
Mark Ronson $ The Business Intl	22	British
Maroon 5	64	American
Mr. Scruff	55	British
Muse	78	British