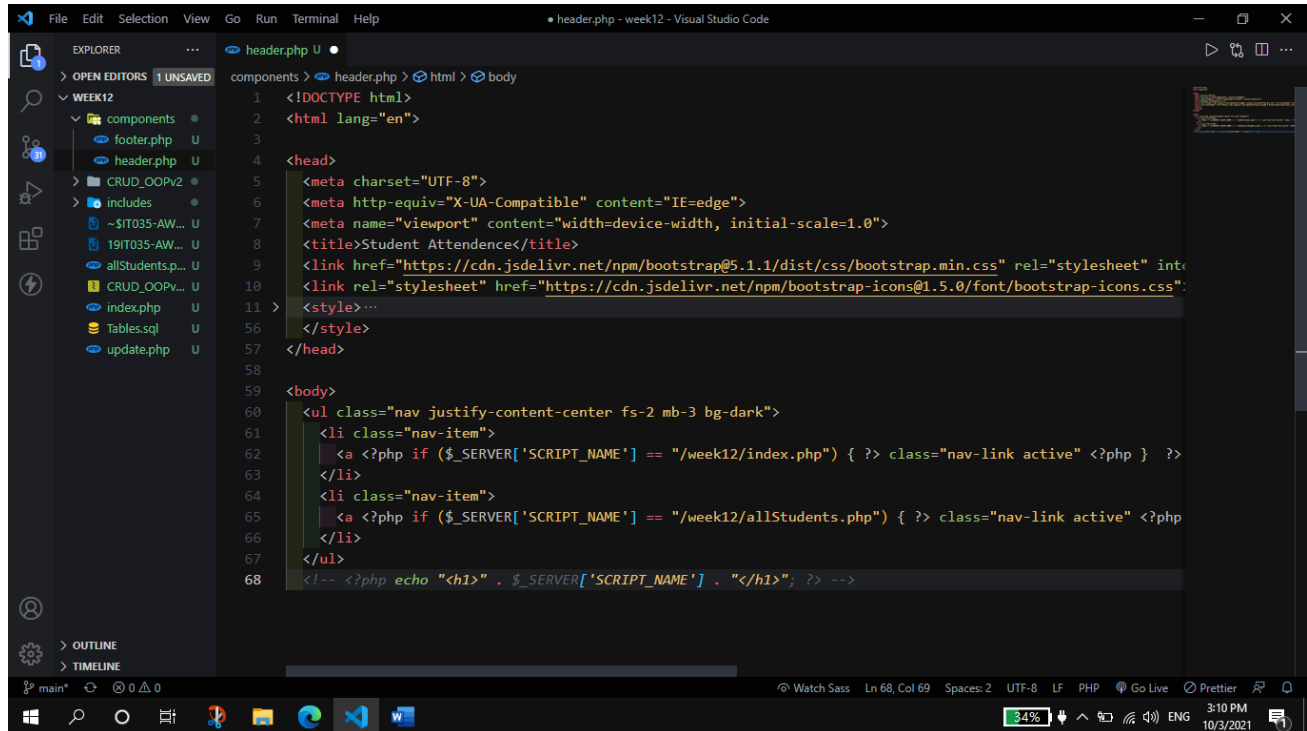


## AWT Practical Week - 12 Task

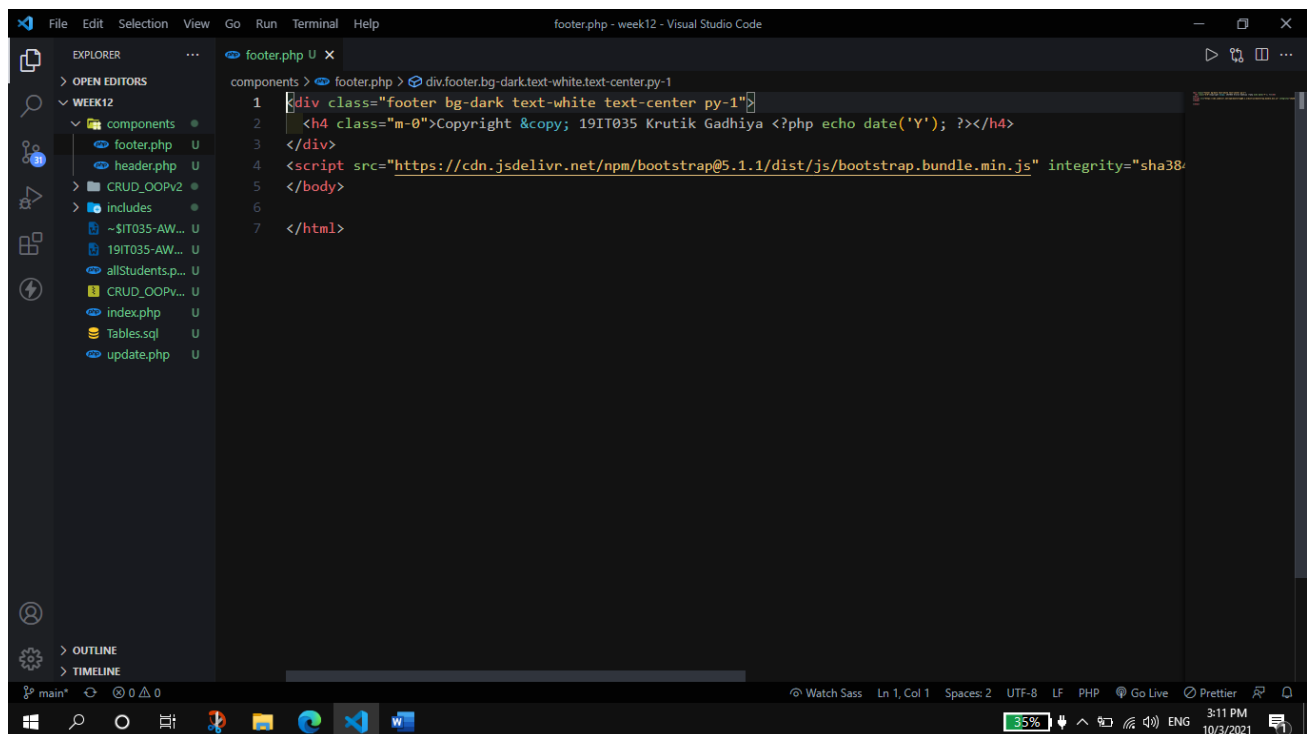
### CRUD OOP

#### Header.php



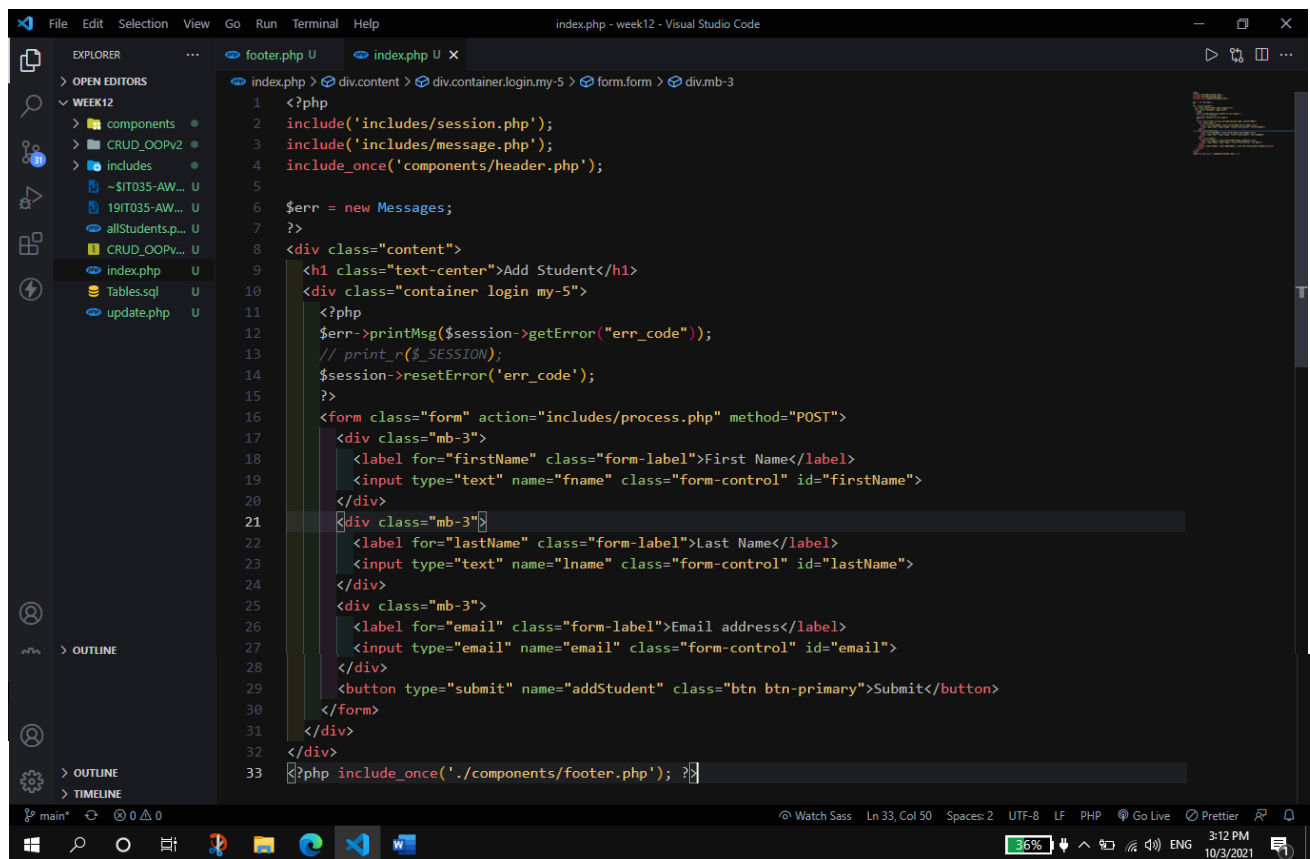
```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5     <meta charset="UTF-8">
6     <meta http-equiv="X-UA-Compatible" content="IE=edge">
7     <meta name="viewport" content="width=device-width, initial-scale=1.0">
8     <title>Student Attendance</title>
9     <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.1/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-11mZc1nOAAIdIgcZcPczB612yL1yr20n8zDASrSrb1B26y6Tvca56Xdrhgz" crossorigin="anonymous">
10    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-icons.css">
11    <style>...
12
13 </style>
14 </head>
15
16 <body>
17     <ul class="nav justify-content-center fs-2 mb-3 bg-dark">
18         <li class="nav-item">
19             <a <?php if ($_SERVER['SCRIPT_NAME'] == "/week12/index.php") { ?> class="nav-link active" <?php } ?>>
20         </li>
21         <li class="nav-item">
22             <a <?php if ($_SERVER['SCRIPT_NAME'] == "/week12/allStudents.php") { ?> class="nav-link active" <?php } ?>>
23         </li>
24     </ul>
25     <!-- <?php echo "<h1>" . $_SERVER['SCRIPT_NAME'] . "</h1>"; ?> -->
26
27 </body>
28 </html>
```

#### Footer.php



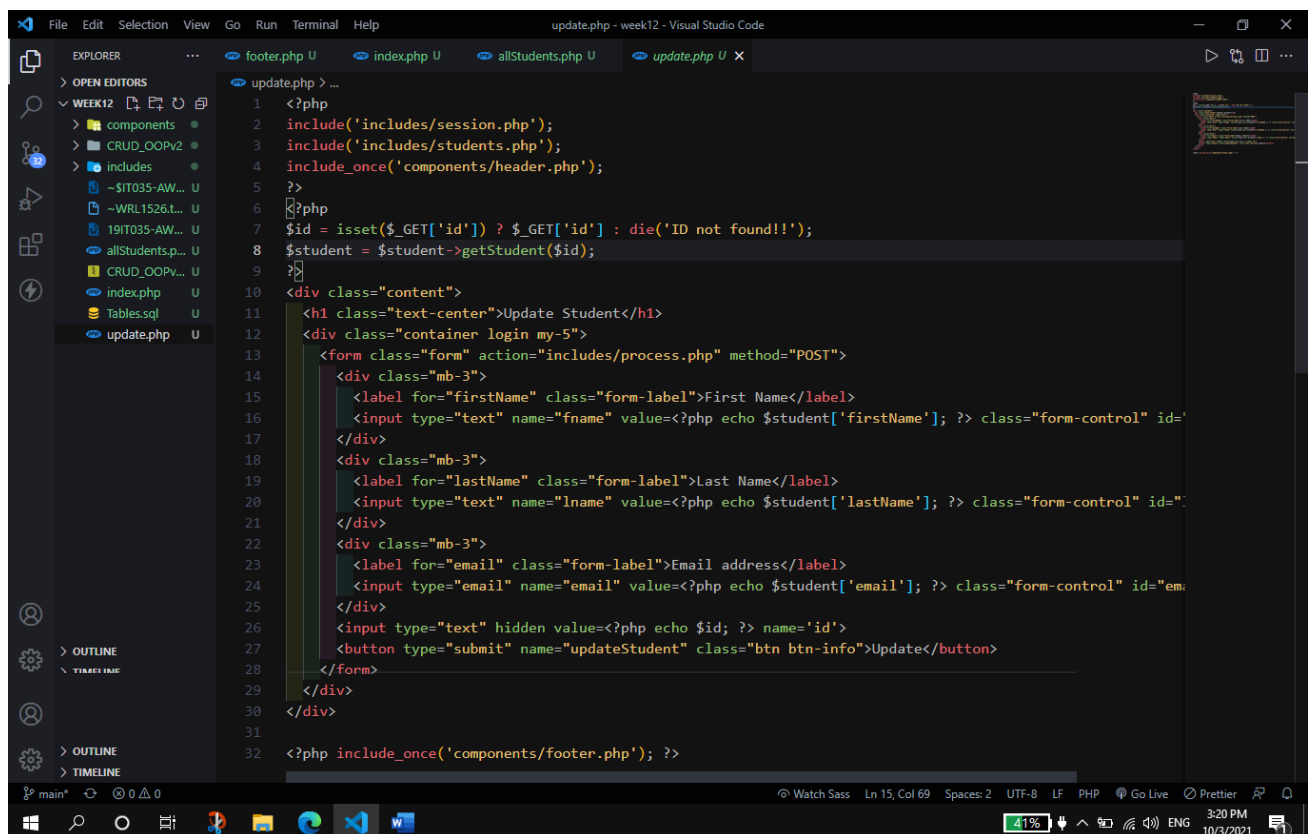
```
1 <div class="footer bg-dark text-white text-center py-1">
2     <h4 class="m-0">Copyright &copy; 19IT035 Krutik Gadiya <?php echo date('Y'); ?></h4>
3 </div>
4 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.1/dist/js/bootstrap.bundle.min.js" integrity="sha384-11mZc1nOAAIdIgcZcPczB612yL1yr20n8zDASrSrb1B26y6Tvca56Xdrhgz" crossorigin="anonymous">
5 </script>
6
7 </html>
```

## Index.php



```
1 <?php
2 include('includes/session.php');
3 include('includes/message.php');
4 include_once('components/header.php');
5
6 $err = new Messages;
7 ?>
8 <div class="content">
9   <h1 class="text-center">Add Student</h1>
10   <div class="container login my-5">
11     <?php
12     $err->printMsg($session->getError("err_code"));
13     // print_r($_SESSION);
14     $session->resetError('err_code');
15     ?>
16     <form class="form" action="includes/process.php" method="POST">
17       <div class="mb-3">
18         <label for="firstName" class="form-label">First Name</label>
19         <input type="text" name="fname" class="form-control" id="firstName">
20       </div>
21       <div class="mb-3">
22         <label for="lastName" class="form-label">Last Name</label>
23         <input type="text" name="lname" class="form-control" id="lastName">
24       </div>
25       <div class="mb-3">
26         <label for="email" class="form-label">Email address</label>
27         <input type="email" name="email" class="form-control" id="email">
28       </div>
29       <button type="submit" name="addStudent" class="btn btn-primary">Submit</button>
30     </form>
31   </div>
32 </div>
33 <?php include_once('components/footer.php'); ?>
```

## Update.php



```
1 <?php
2 include('includes/session.php');
3 include('includes/students.php');
4 include_once('components/header.php');
5
6 ?>
7 $id = isset($_GET['id']) ? $_GET['id'] : die('ID not found!!');
8 $student = $student->getStudent($id);
9 ?>
10 <div class="content">
11   <h1 class="text-center">Update Student</h1>
12   <div class="container login my-5">
13     <form class="form" action="includes/process.php" method="POST">
14       <div class="mb-3">
15         <label for="firstName" class="form-label">First Name</label>
16         <input type="text" name="fname" value=<?php echo $student['firstName']; ?> class="form-control" id="
17       </div>
18       <div class="mb-3">
19         <label for="lastName" class="form-label">Last Name</label>
20         <input type="text" name="lname" value=<?php echo $student['lastName']; ?> class="form-control" id="
21       </div>
22       <div class="mb-3">
23         <label for="email" class="form-label">Email address</label>
24         <input type="email" name="email" value=<?php echo $student['email']; ?> class="form-control" id="em
25       </div>
26       <input type="text" hidden value=<?php echo $id; ?> name='id'>
27       <button type="submit" name="updateStudent" class="btn btn-info">Update</button>
28     </form>
29   </div>
30 </div>
31
32 <?php include_once('components/footer.php'); ?>
```

## allStudents.php

```

1  <?php
2  include('includes/session.php');
3  include('includes/students.php');
4  include('includes/message.php');
5  include('components/header.php');
6
7  $err = new Messages;
8  ?>
9
10 <div class="container">
11     <?php
12     $err->printMsg($session->getError("err_code"));
13     // print_r($_SESSION);
14     $session->resetError('err_code');
15     ?>
16     <table class="table table-bordered bg-white">
17         <thead>
18             <tr>
19                 <th scope="col">ID</th>
20                 <th scope="col">First Name</th>
21                 <th scope="col">Last Name</th>
22                 <th scope="col">Email</th>
23                 <th scope="col">Actions</th>
24             </tr>
25         </thead>
26         <tbody>
27             <?php
28             $list = $student->getStudentList();

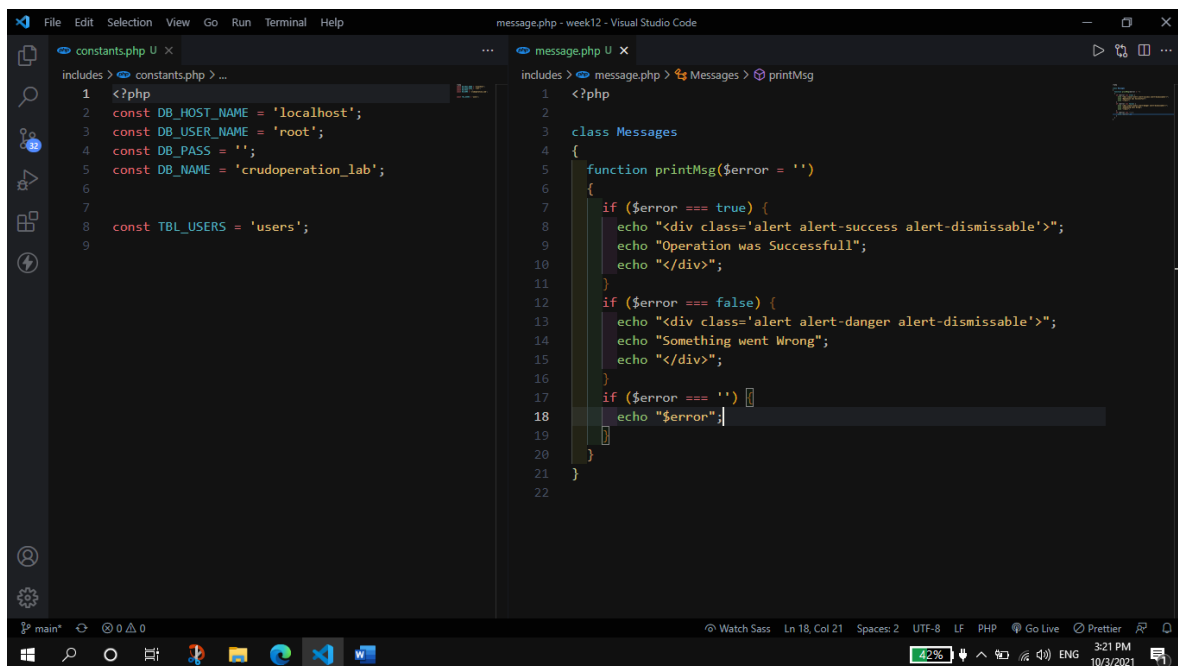
```

```

20     <th scope="col">First Name</th>
21     <th scope="col">Last Name</th>
22     <th scope="col">Email</th>
23     <th scope="col">Actions</th>
24 </tr>
25 </thead>
26 <tbody>
27     <?php
28     $list = $student->getStudentList();
29     // print_r($list);
30     foreach ($list as $k => $val) {
31         echo "<tr><th>" . $val['id'] . "</th>";
32         <td>" . $val['firstName'] . "</td>";
33         <td>" . $val['lastName'] . "</td>";
34         <td>" . $val['email'] . "</td>";
35         <td>
36             <a class="btn btn-warning" href="update.php?id=" . $val['id'] . "><i class='bi bi-pencil-square'>
37             <a class="btn btn-danger" href="includes/process.php?delId=" . $val['id'] . "><i class='bi b:
38         </td>
39     </tr>";
40     }
41     ?>
42 </tbody>
43 </table>
44 </div>
45
46 <?php include('components/footer.php') ?>

```

## Constants.php & message.php

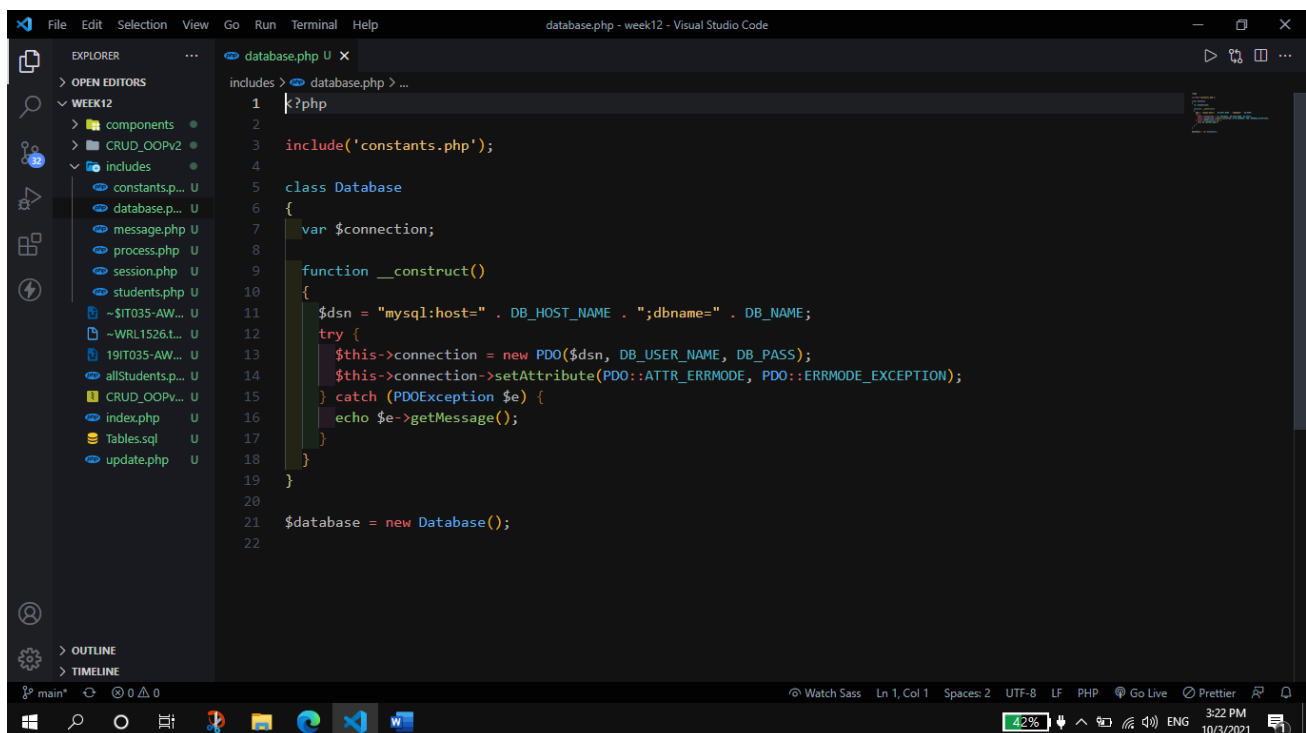


The screenshot shows two PHP files in Visual Studio Code. The left file, `constants.php`, defines database constants. The right file, `message.php`, contains a `Messages` class with a `printMsg` function that displays success or error messages.

```
constants.php
1 <?php
2 const DB_HOST_NAME = 'localhost';
3 const DB_USER_NAME = 'root';
4 const DB_PASS = '';
5 const DB_NAME = 'crudoperation_lab';
6
7
8 const TBL_USERS = 'users';
9

message.php
1 <?php
2
3 class Messages
4 {
5     function printMsg($error = '')
6     {
7         if ($error === true) {
8             echo "<div class='alert alert-success alert-dismissible'>";
9             echo "Operation was Successfull";
10            echo "</div>";
11        }
12        if ($error === false) {
13            echo "<div class='alert alert-danger alert-dismissible'>";
14            echo "Something went Wrong";
15            echo "</div>";
16        }
17        if ($error === '') {
18            echo "$error";
19        }
20    }
21 }
22
```

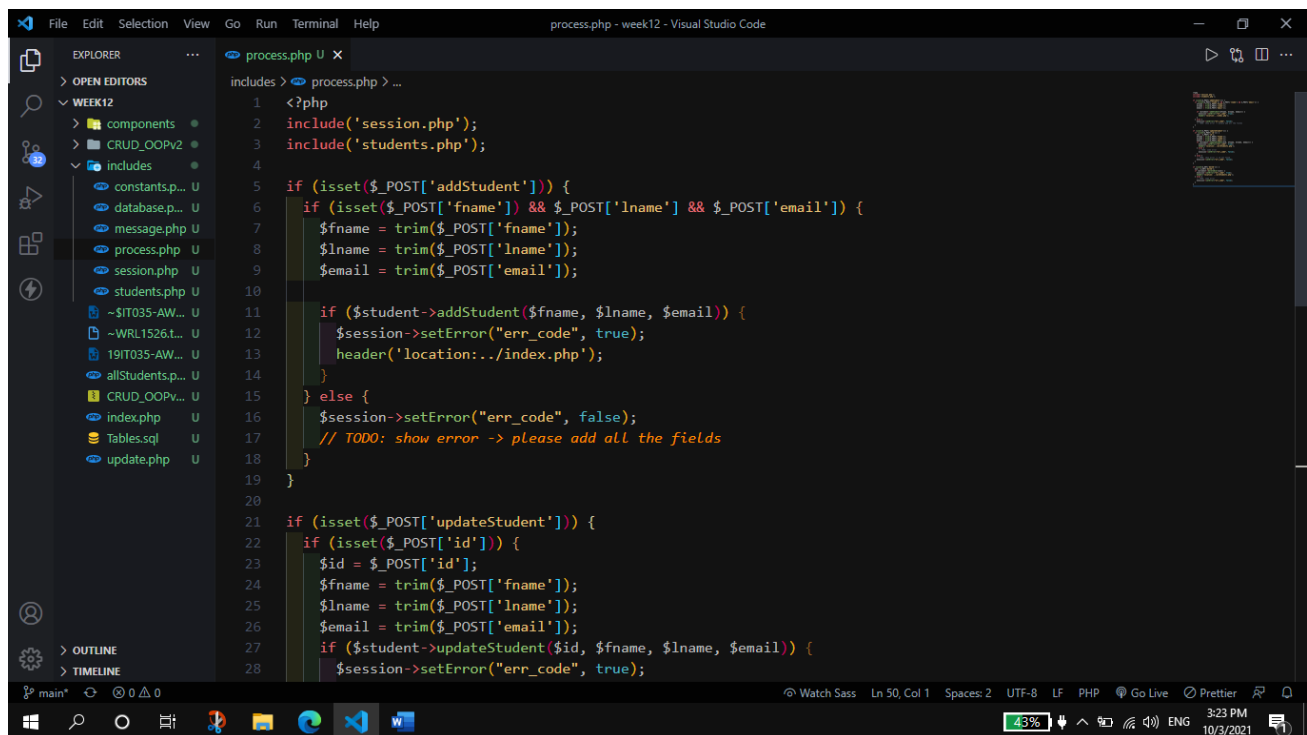
## Database.php



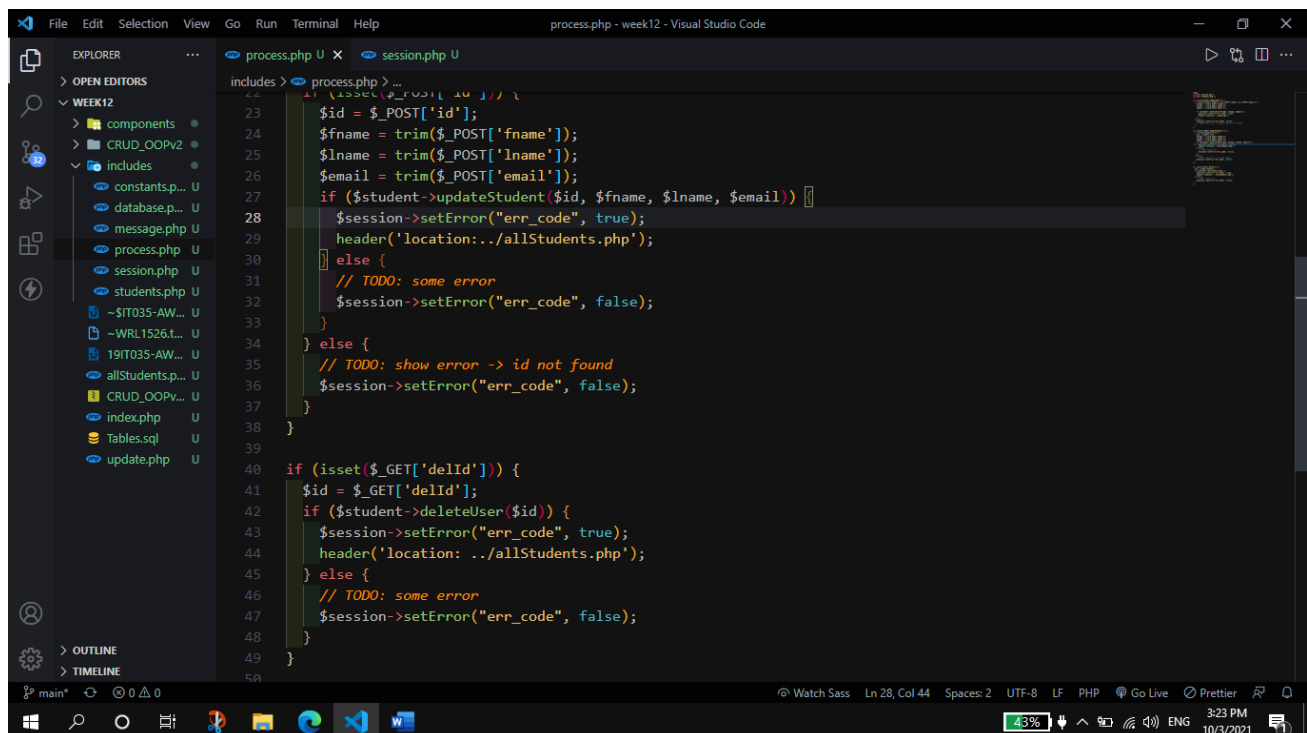
The screenshot shows the `database.php` file in Visual Studio Code. It includes the `constants.php` file and defines a `Database` class with a `__construct` method that establishes a PDO connection to the database.

```
database.php
1 <?php
2
3 include('constants.php');
4
5 class Database
6 {
7     var $connection;
8
9     function __construct()
10    {
11        $dsn = "mysql:host=" . DB_HOST_NAME . ";dbname=" . DB_NAME;
12        try {
13            $this->connection = new PDO($dsn, DB_USER_NAME, DB_PASS);
14            $this->connection->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
15        } catch (PDOException $e) {
16            echo $e->getMessage();
17        }
18    }
19 }
20
21 $database = new Database();
22
```

## Process.php



```
process.php U X
includes > process.php > ...
1 <?php
2 include('session.php');
3 include('students.php');
4
5 if (isset($_POST['addStudent'])) {
6     if (isset($_POST['fname']) && $_POST['lname'] && $_POST['email']) {
7         $fname = trim($_POST['fname']);
8         $lname = trim($_POST['lname']);
9         $email = trim($_POST['email']);
10
11         if ($student->addStudent($fname, $lname, $email)) {
12             $session->setError("err_code", true);
13             header('location: ../index.php');
14         }
15     } else {
16         $session->setError("err_code", false);
17         // TODO: show error -> please add all the fields
18     }
19 }
20
21 if (isset($_POST['updateStudent'])) {
22     if (isset($_POST['id'])) {
23         $id = $_POST['id'];
24         $fname = trim($_POST['fname']);
25         $lname = trim($_POST['lname']);
26         $email = trim($_POST['email']);
27         if ($student->updateStudent($id, $fname, $lname, $email)) {
28             $session->setError("err_code", true);
29         }
30     }
31 }
32
33 if (isset($_POST['delId'])) {
34     $id = $_POST['delId'];
35     if ($student->deleteUser($id)) {
36         $session->setError("err_code", true);
37         header('location: ../allStudents.php');
38     } else {
39         // TODO: some error
40         $session->setError("err_code", false);
41     }
42 } else {
43     // TODO: show error -> id not found
44     $session->setError("err_code", false);
45 }
46
47 if (isset($_GET['delId'])) {
48     $id = $_GET['delId'];
49     if ($student->deleteUser($id)) {
50         $session->setError("err_code", true);
51         header('location: ../allStudents.php');
52     } else {
53         // TODO: some error
54         $session->setError("err_code", false);
55     }
56 }
```



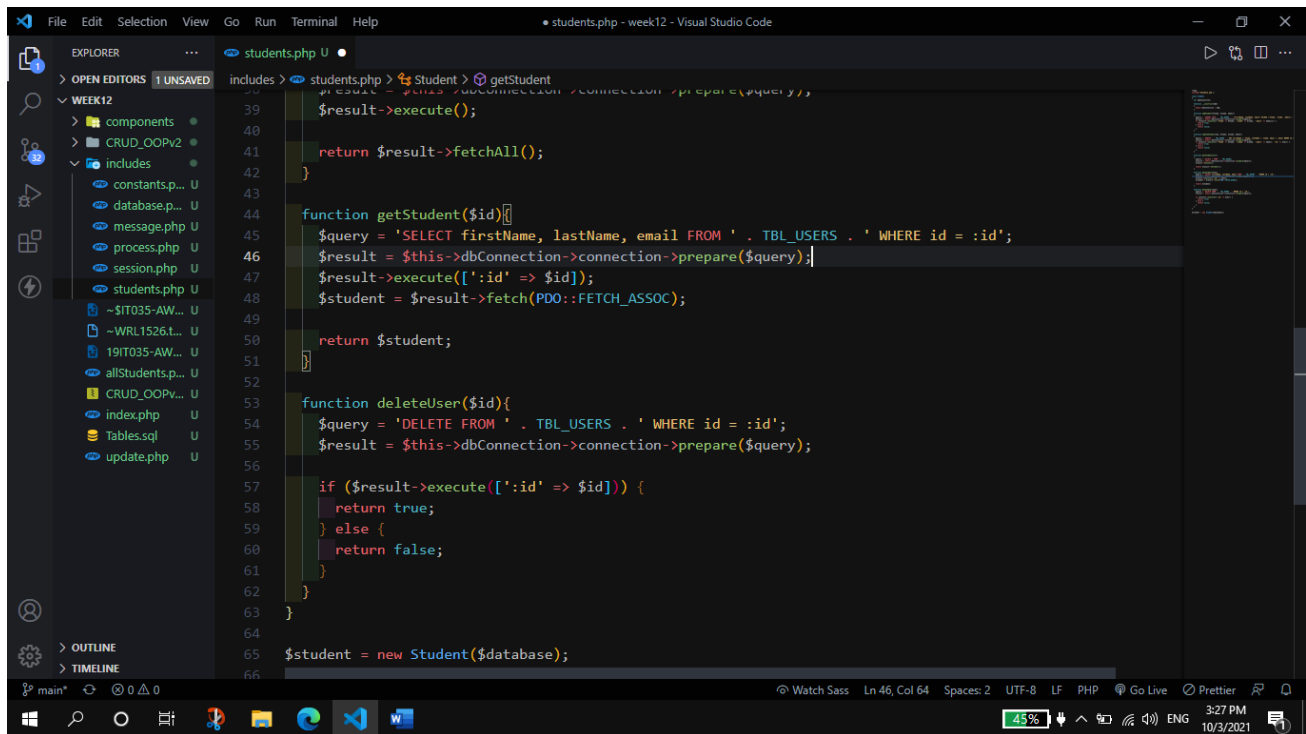
```
process.php U X session.php U
includes > process.php > ...
23 $id = $_POST['id'];
24 $fname = trim($_POST['fname']);
25 $lname = trim($_POST['lname']);
26 $email = trim($_POST['email']);
27 if ($student->updateStudent($id, $fname, $lname, $email)) {
28     $session->setError("err_code", true);
29     header('location: ../allStudents.php');
30 } else {
31     // TODO: some error
32     $session->setError("err_code", false);
33 }
34
35 } else {
36     // TODO: show error -> id not found
37     $session->setError("err_code", false);
38 }
39
40 if (isset($_GET['delId'])) {
41     $id = $_GET['delId'];
42     if ($student->deleteUser($id)) {
43         $session->setError("err_code", true);
44         header('location: ../allStudents.php');
45     } else {
46         // TODO: some error
47         $session->setError("err_code", false);
48     }
49 }
50 }
```

## Session.php

```
1 <?php
2 class Session{
3     function __construct(){
4         session_start();
5     }
6
7     function setError($error, $value){
8         $_SESSION[$error] = $value;
9     }
10
11     function getError($error = ''){
12         if (trim($error) == '') {
13             $data = '';
14         } else {
15             $data = @$_SESSION['err_code'];
16         }
17         return $data;
18     }
19
20     function resetError($error){
21         if (trim($error) == '') {
22             @$_SESSION[] = '';
23         }
24         @$_SESSION[$error] = '';
25     }
26 }
27
28 $session = new Session;
```

## Students.php

```
1 <?php
2 include('database.php');
3
4 class Student
5 {
6     var $dbConnection;
7
8     function __construct($db)
9     {
10         $this->dbConnection = $db;
11     }
12
13     function addStudent($fname, $lname, $email)
14     {
15         $query = 'INSERT INTO ' . TBL_USERS . ' (firstName, lastName, email) VALUES (:fname, :lname, :email)';
16         $result = $this->dbConnection->connection->prepare($query);
17         if ($result->execute([':fname' => $fname, ':lname' => $lname, ':email' => $email])) {
18             return true;
19         } else {
20             return false;
21         }
22     }
23
24     function updateStudent($id, $fname, $lname, $email)
25     {
26         $query = 'UPDATE ' . TBL_USERS . ' SET firstName = :fname, lastName = :lname, email = :email WHERE id = :id';
27         $result = $this->dbConnection->connection->prepare($query);
28         if ($result->execute([':fname' => $fname, ':lname' => $lname, ':email' => $email, ':id' => $id])) {
29             return true;
30         } else {
31             return false;
32         }
33     }
34
35     function getStudentList()
36     {
37         $query = 'SELECT * FROM ' . TBL_USERS;
38         $result = $this->dbConnection->connection->prepare($query);
39         $result->execute();
40     }
41 }
```



```
students.php U •
File Edit Selection View Go Run Terminal Help
students.php U •
EXPLORER
> OPEN EDITORS 1 UNSAVED
WEEK12
> components
> CRUD_OOPv2
> includes
constants.p... U
database.p... U
message.php U
process.php U
session.php U
students.php U
~$IT035-AW... U
~WRL1526L... U
19IT035-AW... U
allStudents.p... U
CRUD_OOPv... U
index.php U
Tables.sql U
update.php U
> OUTLINE
> TIMELINE
main* 0 0 0
Watch Sass Ln 46, Col 64 Spaces: 2 UTF-8 LF PHP Go Live Prettier
45% 3:27 PM 10/3/2021
```

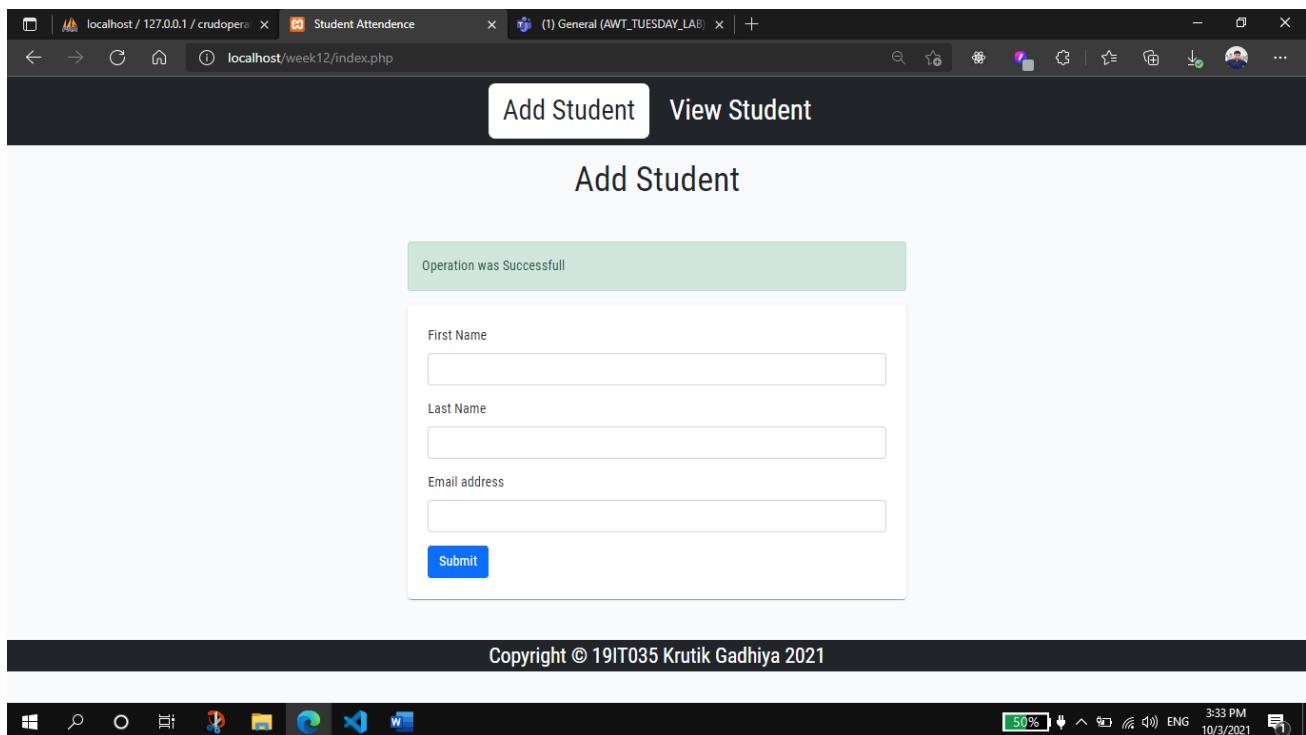
```
students.php
39
40
41
42
43
44
45
46
47
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50
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52
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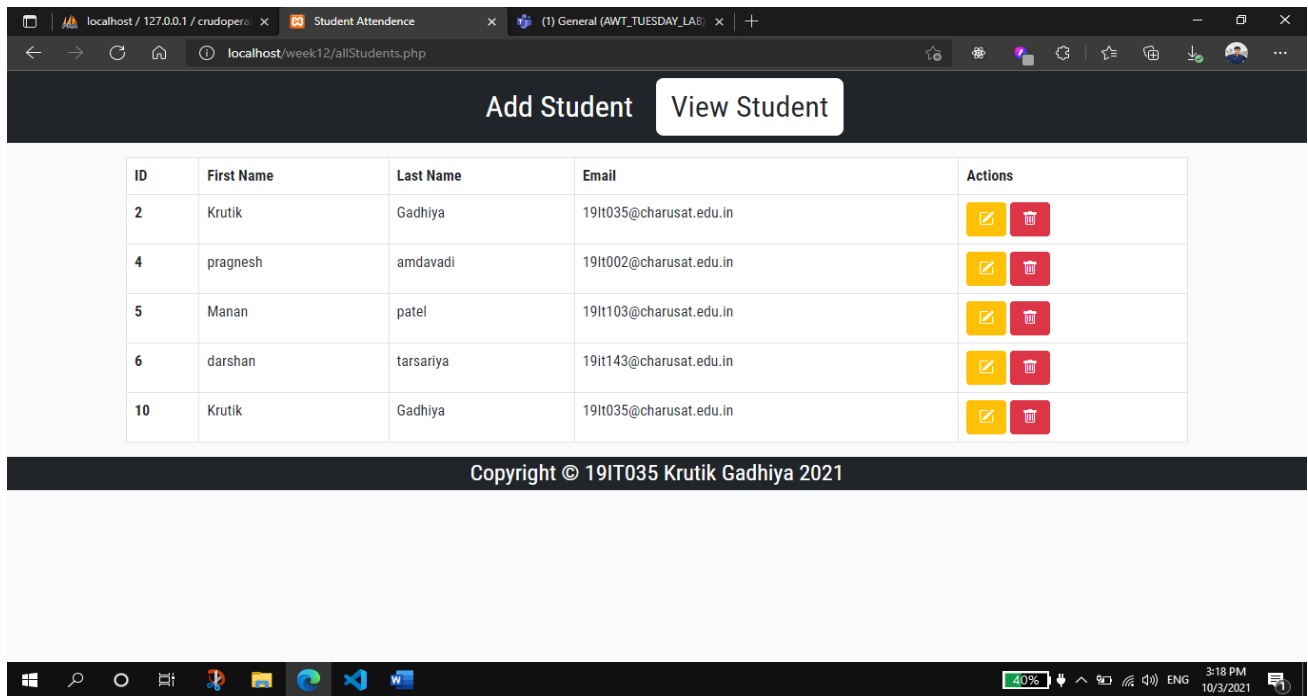
function getStudent($id) {
    $query = 'SELECT firstName, lastName, email FROM ' . TBL_USERS . ' WHERE id = :id';
    $result = $this->dbConnection->connection->prepare($query);
    $result->execute([':id' => $id]);
    $student = $result->fetch(PDO::FETCH_ASSOC);
    return $student;
}











function deleteUser($id) {
    $query = 'DELETE FROM ' . TBL_USERS . ' WHERE id = :id';
    $result = $this->dbConnection->connection->prepare($query);
    if ($result->execute([':id' => $id])) {
        return true;
    } else {
        return false;
    }
}

$student = new Student($database);
```

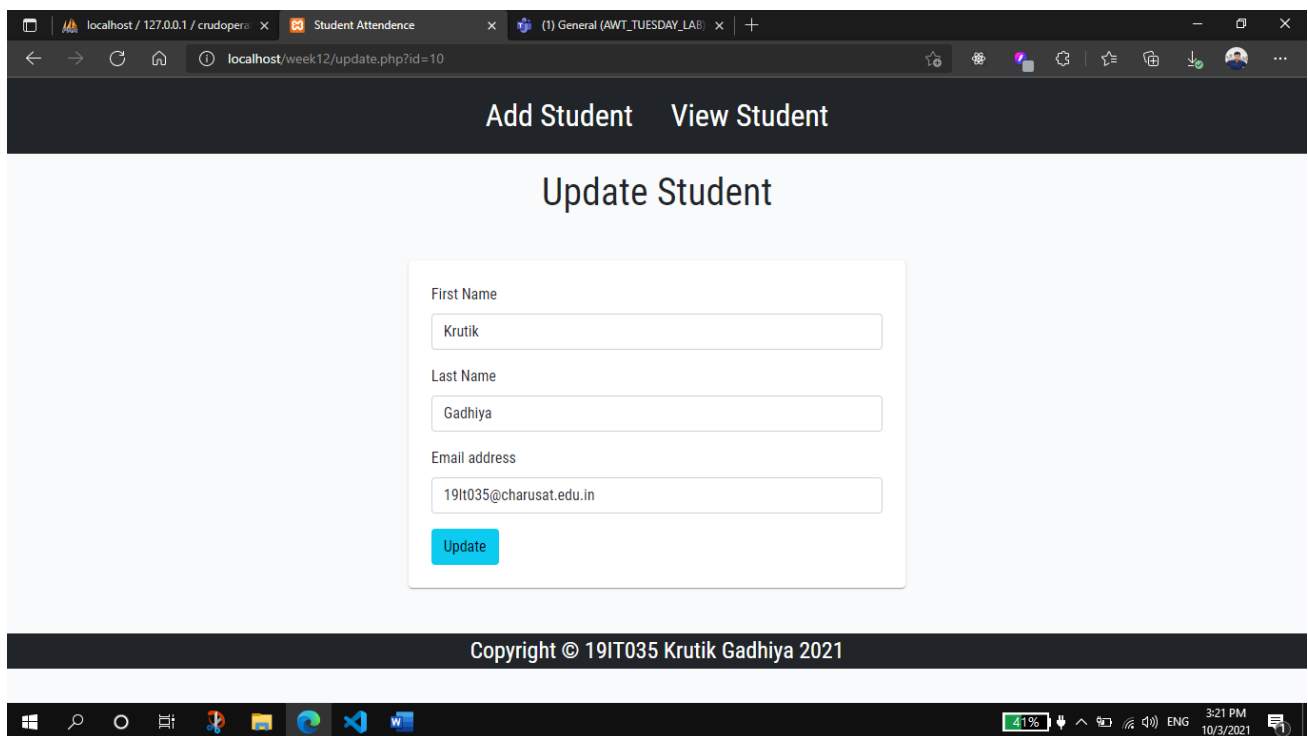
## Output:





ID	First Name	Last Name	Email	Actions
2	Krutik	Gadhiya	19It035@charusat.edu.in	 
4	pragnesh	amdavadi	19It002@charusat.edu.in	 
5	Manan	patel	19It103@charusat.edu.in	 
6	darshan	tarsariya	19It143@charusat.edu.in	 
10	Krutik	Gadhiya	19It035@charusat.edu.in	 

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Update Student

First Name  
Krutik

Last Name  
Gadhiya

Email address  
19It035@charusat.edu.in

Update

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