

Modul Pemrograman Web

CRUD

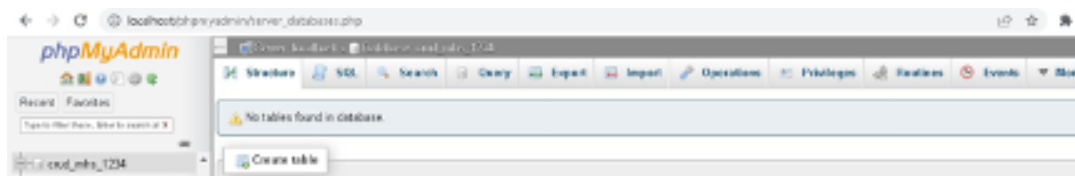
CRUD adalah singkatan dari **Create, Read, Update**, dan **Delete**. Keempat hal tersebut merupakan perintah dengan peran yang esensial dalam sebuah aplikasi database yang sifatnya relational.

Praktikum 10.1

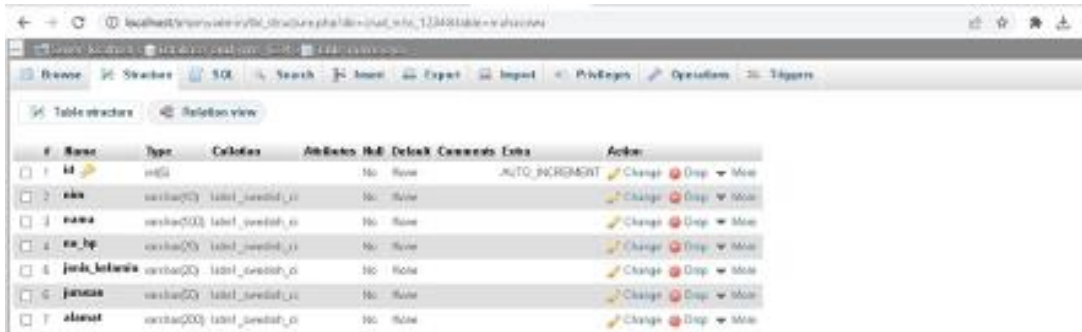
1. Aktifkan apache dan mysql melalui XAMPP, kemudian panggil alamat <http://localhost/phpmyadmin>, klik tab database kemudian **buat database dengan nama crud_mhs_XXXX (4 digit nim terakhir).**



Jika database berhasil dibuat maka akan terdapat pada list sebelah kiri

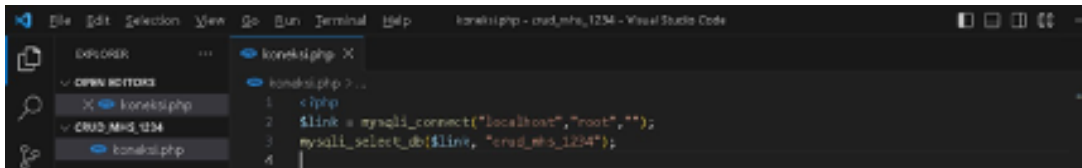


Setelah database berhasil dibuat, kemudian buatlah tabel dengan struktur seperti di bawah ini



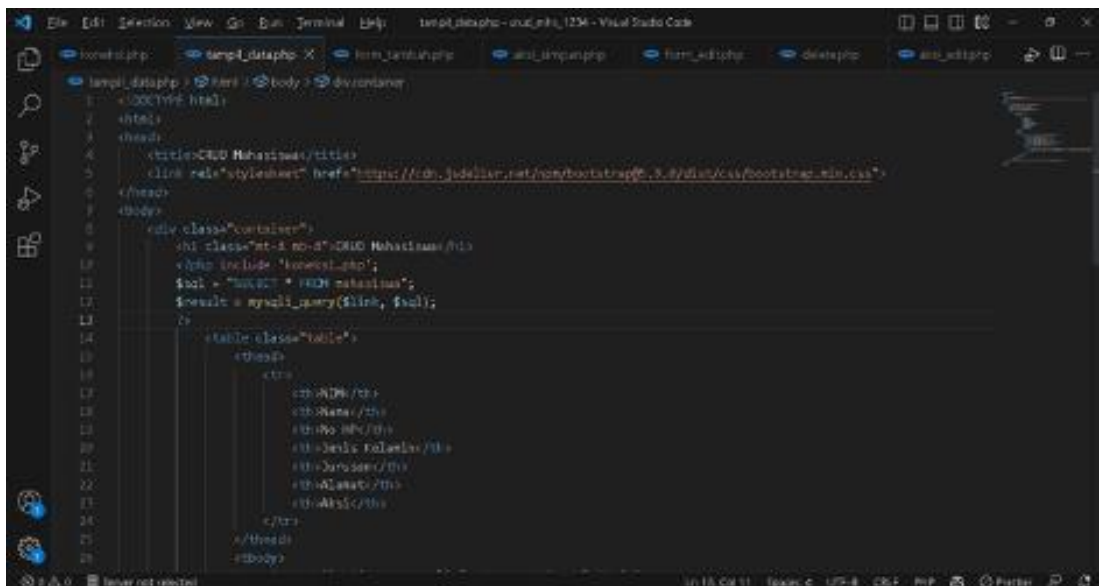
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(4)			No	None		AUTO_INCREMENT	Change Drop Move
2	email	varchar(255)	latin1_general_ci		No	None			Change Drop Move
3	nama	varchar(255)	latin1_general_ci		No	None			Change Drop Move
4	no_hp	varchar(255)	latin1_general_ci		No	None			Change Drop Move
5	juris_lokasi	varchar(255)	latin1_general_ci		No	None			Change Drop Move
6	jurusan	varchar(255)	latin1_general_ci		No	None			Change Drop Move
7	alamat	varchar(255)	latin1_general_ci		No	None			Change Drop Move

2. Buatlah **folder project** di documentroot (htdocs) **dengan nama crud_mhs_XXXX** (4 digit nim terakhir) kemudian open folder tersebut di editor (VS Code)
3. Buatlah file dengan nama **koneksi.php** dengan kode seperti di bawah ini.

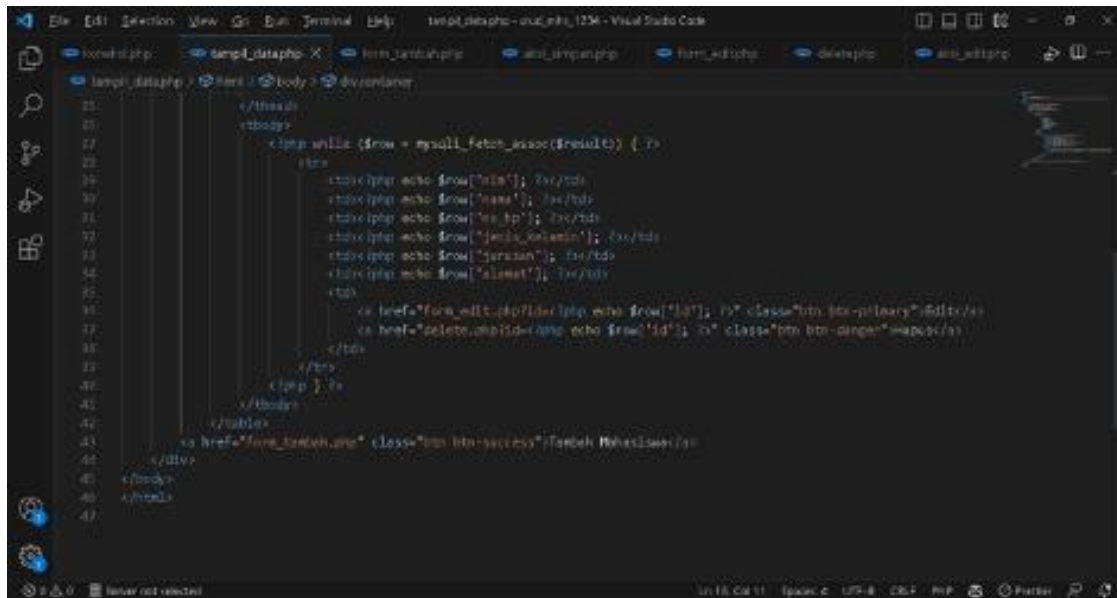


```
1 <?php
2 $link = mysqli_connect("localhost","root","");
3 mysqli_select_db($link, "crud_mhs_1234");
```

4. Buatlah file dengan nama **tampil_data.php** yang berisi kode seperti di bawah ini.

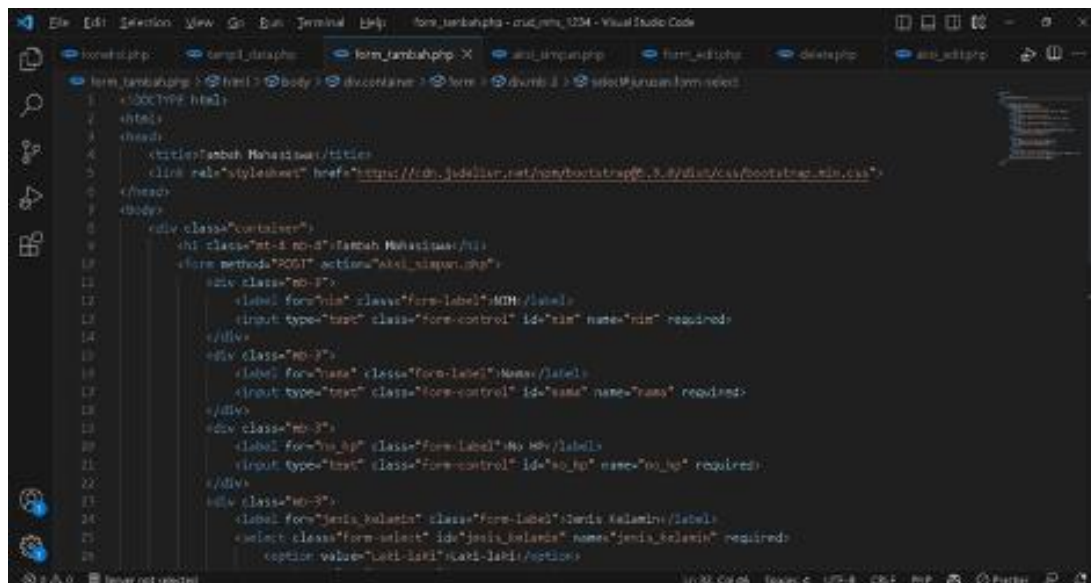


```
1 <?php
2 <html>
3 <head>
4 <title>CRUD Mahasiswa</title>
5 <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css">
6 </head>
7 <body>
8 <div class="container">
9 <div class="text-center">CRUD Mahasiswa</div>
10 <div>
11 <div>
12 <div>
13 <div>
14 <div>
15 <div>
16 <div>
17 <div>
18 <div>
19 <div>
20 <div>
21 <div>
22 <div>
23 <div>
24 <div>
25 <div>
26 <div>
```

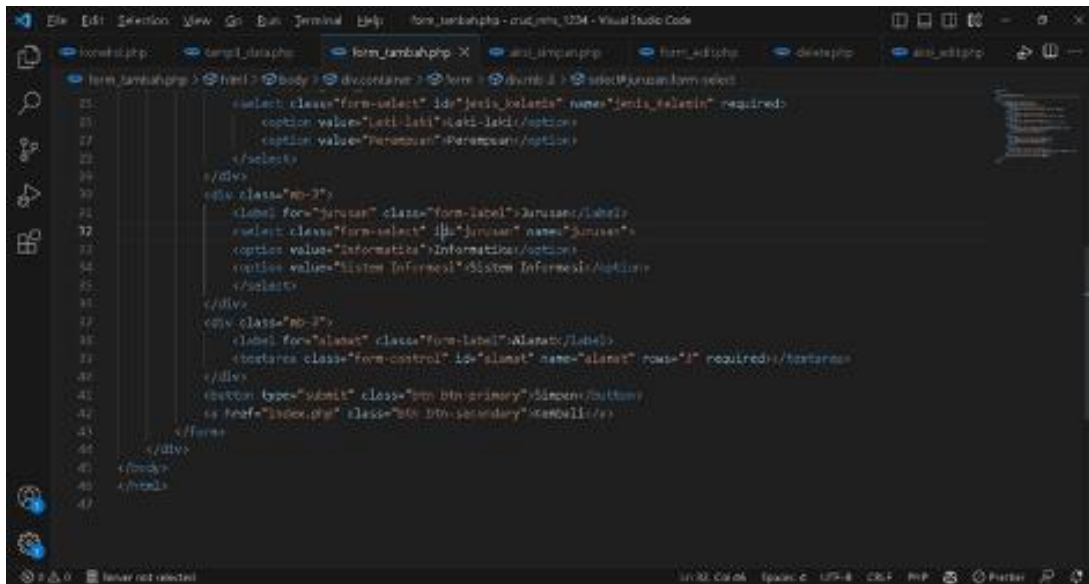


```
1 <!-- temp_data.php -->
2 <?php
3     // koneksi ke database
4     $koneksi = mysqli_connect("localhost", "root", "", "db_crud");
5
6     // cek koneksi
7     if (!$koneksi) {
8         die("Koneksi gagal: " . mysqli_connect_error());
9     }
10
11     // ambil data dari database
12     $query = "SELECT * FROM mahasiswa";
13     $result = mysqli_query($koneksi, $query);
14
15     // cek apakah ada data
16     if (mysqli_num_rows($result) < 1) {
17         echo "Tidak ada data mahasiswa";
18     } else {
19         // tampilkan data dalam tabel
20         <table border="1">
21             <thead>
22                 <tr>
23                     <th>id</th>
24                     <th>nama</th>
25                     <th>no_hp</th>
26                     <th>jenis_kelamin</th>
27                     <th>jurusan</th>
28                     <th>alamat</th>
29                     <th>aksi</th>
30                 </tr>
31             </thead>
32             <tbody>
33                 <tr>
34                     <td>1</td>
35                     <td>John Doe</td>
36                     <td>08123456789</td>
37                     <td>Laki-laki</td>
38                     <td>Informatika</td>
39                     <td>Jl. Merdeka No. 123</td>
40                     <td><a href="#">Edit</a> <a href="#">Hapus</a></td>
41                 </tr>
42             </tbody>
43         </table>
44     }
45
46     // tampilkan tombol tambah
47     <a href="form_tambah.php" class="btn btn-success">Tambah Mahasiswa</a>
48
49 </div>
50 </body>
51 </html>
```

5. Buatlah file **form_tambah.php** yang berisi kode seperti di bawah ini.

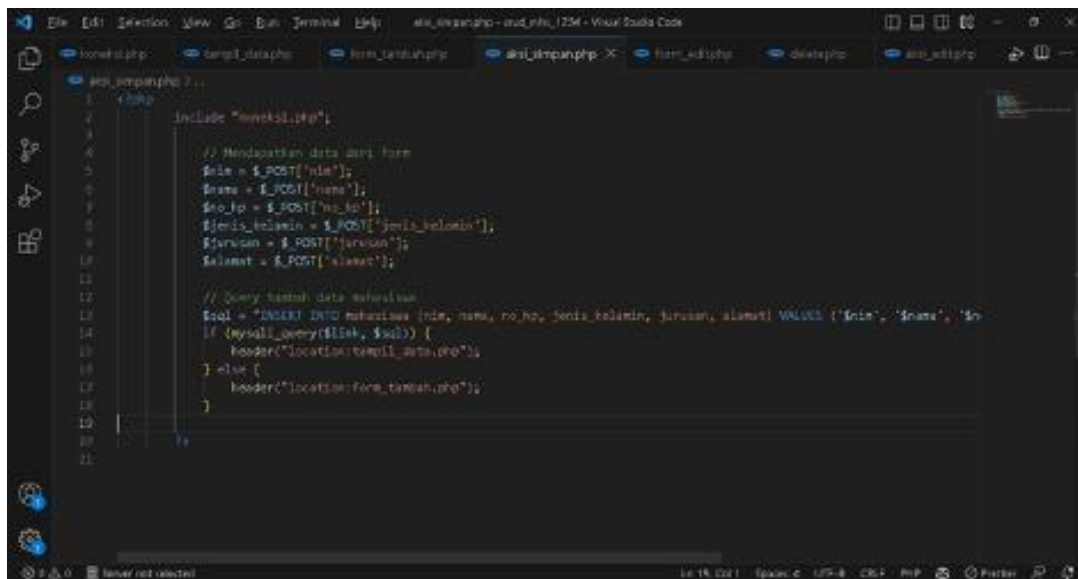


```
1 <!-- form_tambah.php -->
2 <?php
3     // koneksi ke database
4     $koneksi = mysqli_connect("localhost", "root", "", "db_crud");
5
6     // cek koneksi
7     if (!$koneksi) {
8         die("Koneksi gagal: " . mysqli_connect_error());
9     }
10
11     // proses data
12     if (isset($_POST['submit'])) {
13         $nama = $_POST['nama'];
14         $no_hp = $_POST['no_hp'];
15         $jenis_kelamin = $_POST['jenis_kelamin'];
16         $jurusan = $_POST['jurusan'];
17
18         // simpan data ke database
19         $query = "INSERT INTO mahasiswa (nama, no_hp, jenis_kelamin, jurusan) VALUES ('$nama', '$no_hp', '$jenis_kelamin', '$jurusan')";
20         $result = mysqli_query($koneksi, $query);
21
22         // cek apakah data tersimpan
23         if (mysqli_affected_rows($koneksi) > 0) {
24             echo "Data berhasil disimpan";
25         } else {
26             echo "Gagal menyimpan data";
27         }
28     }
29
30     // tampilkan form
31     <div class="container">
32         <div class="row">
33             <div class="col-md-6">
34                 <h3>Form Tambah Mahasiswa</h3>
35                 <form method="POST" action="aksi_simpan.php">
36                     <div class="mb-3">
37                         <label for="nama" class="form-label">Nama</label>
38                         <input type="text" class="form-control" id="nama" name="nama" required>
39                     </div>
40                     <div class="mb-3">
41                         <label for="no_hp" class="form-label">No HP</label>
42                         <input type="text" class="form-control" id="no_hp" name="no_hp" required>
43                     </div>
44                     <div class="mb-3">
45                         <label for="jenis_kelamin" class="form-label">Jenis Kelamin</label>
46                         <select class="form-select" id="jenis_kelamin" name="jenis_kelamin" required>
47                             <option value="laki-laki">Laki-laki</option>
48                             <option value="perempuan">Perempuan</option>
49                         </select>
50                     </div>
51                     <div class="mb-3">
52                         <label for="jurusan" class="form-label">Jurusan</label>
53                         <input type="text" class="form-control" id="jurusan" name="jurusan" required>
54                     </div>
55                     <div class="mb-3">
56                         <button type="submit" class="btn btn-primary">Simpan</button>
57                     </div>
58                 </form>
59             </div>
60             <div class="col-md-6">
61                 <div class="alert alert-success">
62                     Data berhasil disimpan
63                 </div>
64             </div>
65         </div>
66     </div>
67
68 </body>
69 </html>
```



```
25:         <select class="form-select" id="jenis_kelamin" name="jenis_kelamin" required>
26:             <option value="laki-laki">Laki-laki</option>
27:             <option value="Perempuan">Perempuan</option>
28:         </select>
29:     </div>
30:     <div class="mb-3">
31:         <label for="jurusan" class="form-label">Jurusan</label>
32:         <select class="form-select" id="jurusan" name="jurusan">
33:             <option value="Informatika">Informatika</option>
34:             <option value="Sistem Informasi">Sistem Informasi</option>
35:         </select>
36:     </div>
37:     <div class="mb-3">
38:         <label for="alamat" class="form-label">Alamat</label>
39:         <textarea class="form-control" id="alamat" name="alamat" rows="2" required></textarea>
40:     </div>
41:     <button type="submit" class="btn btn-primary">Simpan</button>
42:     <a href="index.php" class="btn btn-secondary">Kembali</a>
43: </form>
44: </div>
45: </body>
46: </html>
```


6. Buatlah file dengan nama **aksi_simpan.php** yang berisi kode



```
1: <?php
2: include "header.php";
3:
4: // Mendapatkan data dari form
5: $nim = $_POST['nim'];
6: $nama = $_POST['nama'];
7: $no_hp = $_POST['no_hp'];
8: $jenis_kelamin = $_POST['jenis_kelamin'];
9: $jurusan = $_POST['jurusan'];
10: $alamat = $_POST['alamat'];
11:
12: // Query tambah data mahasiswa
13: $sql = "INSERT INTO mahasiswa (nim, nama, no_hp, jenis_kelamin, jurusan, alamat) VALUES ('$nim', '$nama', '$no_hp', '$jenis_kelamin', '$jurusan', '$alamat')";
14: if (mysqli_query($koneksi, $sql)) {
15:     header("location: tampil_data.php");
16: } else {
17:     header("location: form_tambah.php");
18: }
19:
20:
21: </?php>
```

7. Buatlah file dengan nama **form_edit.php** yang berisi kode

Modul CRUD (Pertemuan 11) - Pemrograman Web



```

1 <DOCTYPE html>
2 <html>
3 <head>
4 <title>Edit Mahasiswa</title>
5 <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css">
6 </head>
7 <body>
8 <div class="container">
9 <div class="row">
10 <div class="col-4">Edit Mahasiswa</div>
11 </div>
12 // koneksi ke database
13 include "koneksi.php";
14 // Mendapatkan data mahasiswa berdasarkan ID
15 $id = $_GET['id'];
16 $sql = "SELECT * FROM mahasiswa WHERE id='$id'";
17 $result = mysqli_query($link, $sql);
18 $data = mysqli_fetch_assoc($result);
19 </div>
20 <form method="POST" action="aksi_edit.php">
21 <input type="hidden" name="id" value="{php echo $data['id']; }">
22 <div class="row">
23 <div class="col-4">
24 <label for="nama" class="form-label">NAMA</label>
25 <input type="text" class="form-control" id="nama" name="nama" value="{php echo $data['nama']; }" required>
26 </div>
27 <div class="col-4">
28 <label for="nama" class="form-label">NAMA</label>

```

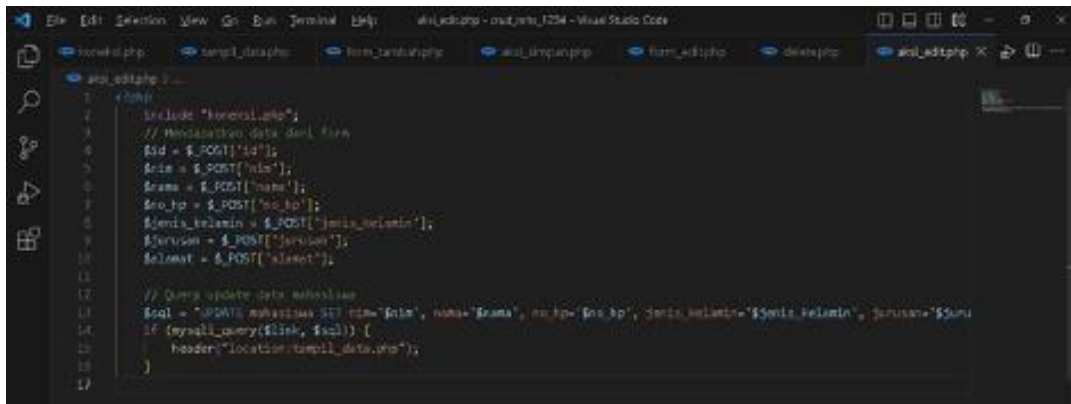
```

1  file Edit Selection View Go Run Terminal Help form.edithp - cod, pte, 1234 - Visual Studio Code
2  form.edithp target.edithp form.edithp form.edithp form.edithp X form.edithp form.edithp
3  form.edithp > text > body > <div>container</div>
4
5      <div class="mb-3">
6          <label for="name" class="form-label">Name</label>
7          <input type="text" class="form-control" id="name" name="name" value="{<input type="text" id="name" value="">}" required="">
8      </div>
9
10     <div class="mb-3">
11         <label for="phone" class="form-label">Phone</label>
12         <input type="text" class="form-control" id="phone" name="phone" value="{<input type="text" id="phone" value="">}" required="">
13     </div>
14
15     <div class="mb-3">
16         <label for="email" class="form-label">Email</label>
17         <input type="text" class="form-control" id="email" name="email" value="{<input type="text" id="email" value="">}" required="">
18     </div>
19
20     <div class="mb-3">
21         <label for="address" class="form-label">Address</label>
22         <input type="text" class="form-control" id="address" name="address" value="{<input type="text" id="address" value="">}" required="">
23     </div>
24
25     <div class="mb-3">
26         <label for="password" class="form-label">Password</label>
27         <input type="password" class="form-control" id="password" name="password" value="{<input type="password" id="password" value="">}" required="">
28     </div>
29
30     <div class="mb-3">
31         <label for="confirm-password" class="form-label">Confirm Password</label>
32         <input type="password" class="form-control" id="confirm-password" name="confirm-password" value="{<input type="password" id="confirm-password" value="">}" required="">
33     </div>
34
35     <div class="mb-3">
36         <label for="submit" class="form-label">Submit</label>
37         <input type="submit" class="form-control" id="submit" name="submit" value="Submit" value="">
38     </div>
39
40 </div>
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```

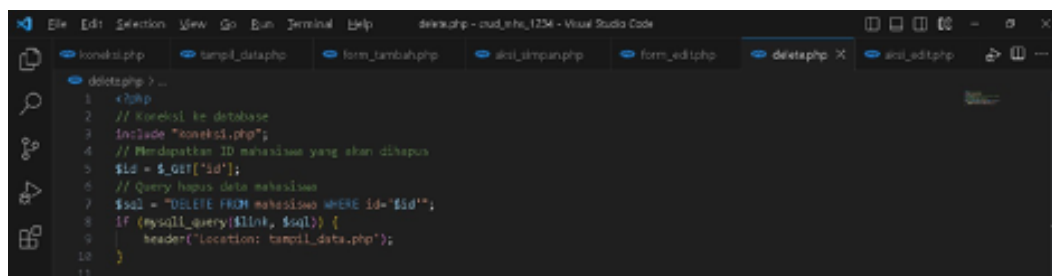
[illegible]

8. Buatlah file dengan nama **aksi_edit.php** yang berisi kode



```
1 <?php
2 include "koneksi.php";
3 // Mendapatkan data dari form
4 $id = $_POST['id'];
5 $nim = $_POST['nim'];
6 $nama = $_POST['nama'];
7 $no_hp = $_POST['no_hp'];
8 $jenis_kelamin = $_POST['jenis_kelamin'];
9 $jurusan = $_POST['jurusan'];
10 $alamat = $_POST['alamat'];
11
12 // Query update data mahasiswa
13 $sql = "UPDATE mahasiswa SET nim='$nim', nama='$nama', no_hp='$no_hp', jenis_kelamin='$jenis_kelamin', jurusan='$jurusan' WHERE id=$id";
14 if (mysqli_query($link, $sql)) {
15     header("location: tampil_data.php");
16 }
17
```

9. Buatlah file dengan nama **delete.php** yang berisi kode



```
1 <?php
2 // Koneksi ke database
3 include "koneksi.php";
4 // Mendapatkan ID mahasiswa yang akan dihapus
5 $id = $_GET['id'];
6 // Query hapus data mahasiswa
7 $sql = "DELETE FROM mahasiswa WHERE id=$id";
8 if (mysqli_query($link, $sql)) {
9     header("location: tampil_data.php");
10 }
11
```


Kemudian jalankan, dan tampilanya seperti di bawah ini :

The first screenshot shows the 'CRUD Mahasiswa' main interface. It features a table with columns: NIM, Nama, No HP, Jenis Kelamin, Jurusan, Alamat, and Aksi. Below the table is a green button labeled 'Tambah Mahasiswa'.

The second screenshot shows the 'Tambah Mahasiswa' form. It includes input fields for NIM (1234), Nama (Ika Nur Fajri), No HP (001), Jenis Kelamin (Laki-laki), Jurusan (Sistem Informasi), and Alamat (Klaten). At the bottom are 'Simpan' and 'Kembali' buttons.

The third screenshot shows the 'CRUD Mahasiswa' table after data entry. The table has columns: NIM, Nama, No HP, Jenis Kelamin, Jurusan, Alamat, and Aksi. The first row contains: 1234, Ika Nur Fajri, 001, Laki-laki, Sistem Informasi, Klaten. The 'Aksi' column has 'Edit' and 'Hapus' buttons. Below the table is a green button labeled 'Tambah Mahasiswa'.

CHALLENGE Pertemuan 10

Silakan ubah form bagian jenis kelamin dari type select ke radio.
Kumpulkan hasil praktikum ke classroom.