2013090068

PRAKTIKUM

PEMROGRAMAN WEB

SEMESTER GENAP TAHUN AKADEMIK 2021/2022

Tanggal

30 mei 2022

Materi

PHP dan Database

PRODI SISTEM INFORMASI
FAKULTAS TEKNIK
UNIVERSITAS NUSANTARA PGRI KEDIRI

Dipindai dengan CamScanner

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BAB I

DASAR TEORI

* MYSQL API (Application Programming Interface) merupakan komponen yang digunakan untuk berkomunikasi dengan database mysql melalui PHP
* Proses Query Database
  - membuat koneksi ke server database dan menentukan database yang akan digunakan
  - membuat SQL (Struktur Query language)
  - melakukan proses Query
  - mengumpulkan hasil Query kedalam sebuah variabel untuk ditampilkan /diproses.

MY SQLi

MY SQL Improved (MYSQLI) merupakan teknik pengaksesan terhadap data base MY SQL yang merupakan perkembangan dari PHP 5.x atau yang paling baru. Dengan menggunakan MYSQLi memungkinkan untuk mengakses Stored Procedured. Stored Function atau Prepared Statement

MY SQLi extension memiliki sejumlah manfaat diantaranya adalah:

- menggunakan interface object oriented.
- mendukung penggunaan Prepared Statement
- mendukung penggunaan multiple Statement
- mendukung kegunaan transaction.
- meningkatkan terhadap kemampuan pencarian kesalahan program (debugging)
- mendukung penggabungan server.

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- Berikut ini daftar API MYSQLi yang dipakai sebagai berikut

API	Fungsi
MY SQL→Query	mengirimkan Query ke database yang aktif.
$MYSQL_Result→Fetch_array	menampilkan data hasil Query yang dapat diakses dengan nomor array Field atau nama Field.
$MYSQL_result→num_rows	mengambil jumlah baris atau data hasil dari Proses Query.
$MYSQL→error	menampilkan Pesan kesalahan atau kegagalan koneksi

koneksi Database.

contoh koneksi database MYSQL menggunakan API MYSQL dan PHP.

```
<?PHP.
//mendefinisikan variabel.
$hostname = "Localhost"; //Alamat server db MYSQL
$username = "root"; //username db MYSQL
$Password = "  a; //Password db MYSQL
$database = "akademik"; //nama

$koneksi = New MYSQLi ($hostname, $username, $Password, $database)
        or die ("koneksi server database gagal ", MYSQL-error());
echo " koneksi Server Database berhasil";

?>
```

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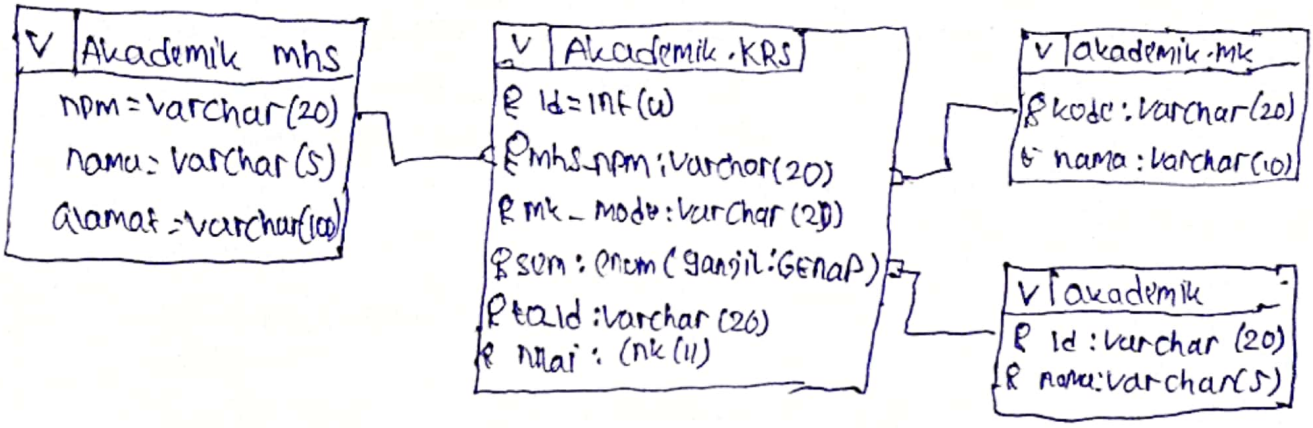
BAB II

PERCOBAAN DAN LATIHAN

* membuat database dengan nama akademik.
* membuat tabel dengan nama krs, mhs, mk, dan ta
Gambar database akademik dan relasinya.



membuat koneksi.php dan sesuaikan username dan pasword pada database.

```
<?php
$ username = "localhost";
$ username = "root";
$ Pasword = "";
$ dbname = "akademik";

// create conection
$ check = new mysqli ($servernamp, $ username, $pasword, $ dbname);
// check conection
if ($con -> connect_error)?
    die ("conenetion failed :". $conn -> connect_error);
}
?>
```

Koneksi PHP.

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File PHP dengan nama index.PHP dengan format Html

```
<!DOCTYPE html>
<HTML>
<head>
    <meta charset ="utf-8">
    <HHE ></HHE>
    <style type="text/ccss">
    a {text-decoration :none : Fronf-ze :15 px; Font-Famxlx :Sans-selfi
      Padding ; u px 10 }
    u{ Padding 114 px}
    u{ ost-style : none : display : inline ; }
    li a { background : # 222i color ; # dddddd }
    li a :hover { background : # dddu : color : #  }
     navi { background : # 222  height : 50 px }
</style>
</head>
<body>
        <nov class="navi">
        <UL>
        <li><a href: "Mhs.php" > MahaSiswa </a></L >
        <LI><a href= "krs.php" > KRS</a></li>
        <LI><a href= "Mk.php > Mk <La></li>
        <li > ca href="ta.Php > <A </a> L/li>
        <NL>
        </nov>
</body>
</html>
```

Ile Php dengan nama menu.Php

```
<o. href 2" mhs.PHP" > Hem</a>1 <a href ="Mhs-adl-Php">AAD </a>
```

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File php dengan nama mhs.php

```
<?php
  include koneksi.php
  include index.php;
?>
<!DOCTYPE html>
<html>
<head>
<title> mhs </title>
</head>
<body>
    <h2 align="center">mahasiswa</h2>
    <?php include 'menu.php';?>
    <table width='100%' border='1'>
    <head>
    <tr>
    <th width='5%'>No.</th>
    <th width='5%'> Act </th>
    <th width='10%'> NPm </th>
    <th width='10%'> nama </th>
    <th width='10%'>alamat</th>
    </tr>
    </thead>
    <tbody>
    <?php
    $ sql='select * from mhs';
    $res = $conn -> query ($sql);
    if ($res -> num_rows > 0 ){
    $ i = 0;
    while $dat = $res -> fetch_assoc ()){
    $ i++;
    echo "<tr>
            <td> $i </td>
            <td> <a href="mhs.detail.php?npm="$ dat['NPm'] >ttu</a></td>
            <td>". $dat ["NPm"]. "</td>
            <td>". $dat ["nama"]."</td>
            <td>".$dat ["alamat"]."</td>
        </tr>"
      }
      }
      ?>
    </tbody>
    </table>
    </body>
    </html>
```

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File PHP untuk Forum tambahan data dengan nama mk.a.PHP.

```
<!DOCTYPE html >
<html>
<head >
<title> mata kuliah </title>
</head>
<body>
    <h2 > mas koran add (ch+ >
    <a href. "mk.hr"> hat </(a) | ca href="mk.add.php">tambah</a >
    <Form name="myform action = "mk-proc.php"
    kode<br
    <input type="text" name2 "kode" Id2"kode">
    <br> nama (br>
    <input type ="text" name;"nama" Id 2"nama" size="30">
    <br>
    <input type="submit" nama="mk_name"
    </form>
    </body>
    <html>
```

File PHP untuk mengedit data dengan nama Dec-detail.PHP.

```
<? Php
    include koneksi.php';
        $kode = $GET ('kode')
        $SG = " FMo * From me kode, $kode';
        $res = $Con →query ($SQL)
        $ dat = $res → File-assol);
  ?>
  <!DOCTYPE html)
  (html)
  (head)
  (head) Mata kuliah (MK)
  <<head>
  <head >
      <h2>mata kuliah dis <h1)
      <a href "include.php"> lihat 1 <a href: "mk_add.PHP, tambah ((a)
      <br ><Form name="MyForm "action,"mk_procip hs method, POS>
      <mov type "text" nama "code d2"code "value = <(dat[kode]?:;
      <br nama <br>
      <input type="text" name>"nama "=lama "value="<?= $dat[nama]<";
      <br>
      <input type="submit nama ="me dit "Id=mk_edit Value: Perbarui">
      <input type = submit "nama=mk_data Id = mk-delete" value,"Hapus">
      </an>
  </body>
  < html>
```

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File PHP untuk memproses data mhs.proc.PHP

```
<? PHP
  include'koneksi.PHP';
  IF (i) set ($- POST ['submit -add']) {
  $npm = $- POST['npm'];
  $nama = $- POST[ nama];
  $ alamat = $ - POST [alamat];
        $SQL = Insert into mhs (npm, nama, alamat)
        Value$ ('npm','$ nama','$ alamat')";
        IF (!$ npm query ($SQL)) {
        die (Tambah mhs gagal);
        }
        ase {
            user("Location : mhs .PHP");
        ?

  }
  IF (isset ($[- POST [ submit - edit ])){
  $npm = $ - POST ('npm');
  $nama = $ - POST ('nama');
  $alamat = $ POST ['alamat'];
        SQL = UPdate mhs set nama :$ nama, alamat : alamat 'where npm "= $npm';
            IF (!con → query ($ SQL)){
        die edit mhs gagal )
      }
      else {
          hender ("Location = mhs.PHP");
  }
  IF (isset ($Port [ submit delete ])){
  $ npm = $ - POST (npm);
  $ SQL = Delete From mhs where npm :$ npm'");
  IF (!$ conn → query (SQL)){
     • die (hapus mhs gagal);
  }
  (ase {
     header ("action .mhs. PHP");
    }
 }
?>
```

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File PHP untuk menampilkan data dengan mk-PHP

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```
<?PHP
    Include 'koneksi PHP';
    Include 'index.PHP';
?>
<!DOCTYPE html>
<html>
<head>
</title>Mata kuliah</title>
</head>
<body>
    <h2 align="center"> mata kuliah </h2>
    <a herf="mk.php">Lihat</a>|<a herf="mk-add.php">Tambah</a>
    < Fa bk width:'100% border='2'>
    </head X tr>
            <th width = '2% =NO.</th>
            <th width='5%'=act </th>
            <th width='100%'= kode</th>
            <th width ='10%'> nama </th>
            <ur>
    </head>
    </body>
        <?php
        $sql = "select "1=rem me"
        $ter = $conn ->query ($sql):
        IF ($res ->atms-rows = 20'{
        $:0;
    while (dat = $ res - Fetch-assoc())}
    $:H;
    echo"<tr align="center">
        < td :$user=
    <td> (herf, mk-detail.php:kode="$dat [include]'edit (bot)
    < td)
    <td>"- $dat [kode]-<td>
    <td>"-$dat [ "name]. <td>
    </tr>")
  }
</body >
<|table>
<|body >
</html >
```

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File PHP untuk form tambah data dengan nama mk.add.PHP

```
<!DOCTYPE html>
<html>
<head>
<title> mata kulah </title>
<head>
<body>
    <h2> mata kuliah add</h2>
    <a herf="mk.php>Lihat 2/a>|<a href="mk.add.PHP> Tambah </a>
    <From name="MY From action = mk.  ." merkode "POST">
    kode<br>
    <input type="text" name "kode" id kode">
    <bi>nama <br>
    <input type = "text "name", name "td "nama" size="30">
    <br>
    <input type = "submit "name" mk-name "id="mk add value ="Simpan" >
    </Form>
    </body>
    </html>
```

File PHP untuk mengedit data mk dengan nama mk-detail.PHP

```
<?PHP
    include koneksi.PHP;
        $kode = $_GET ['kode']i
        $ sql  = Select * From mk
        $ rcs  = Cmn →query(sql)>
        $ dat  = $rcs → Fetch_assoc();
 ?>
<!DOCTYPE html>
<HTML>
<head >
<body>
    <h2> mata kuliah add </h2>
    <a href = mk.PHP"> Lihat </a> | <a href .mk_add.PHP> TAMBAH <10>
    <br> From nama ="MY From "action = "mk-proc PHP : method : Post >
    kode<br>
    <input type >"text"name" "kode"id="kode value= "<( $dut ['kode']?)"
    <br nama <br>
    < input type="tex "name id = name" value = "<?> = $ dtol ['name']? ? >
    <br>
    < input type = "Submit "name"mk_edit id="mk edit "value= Perbarui>
    < input type = Submit "name" = dete id = mk delete value="Hapus">
    < /room3
    </body>
    <HTML>
```

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File PHP untuk Proses data dengan nama mk.proc.PHP 2013030068

```
<? Php
    include 'koneksi.PHP;
    IF(ISSC($-POST['mk_add'])){
            $kode = $-Post ['kode']:
            $nama = $-Post[ nama];
            $sql  ="insert inko mk (kode,nama)
                    values ['$kode ; $nama';"
            IF(!conn ->query(sql)){
             die (tambah mo gagal):
        }
        Cise{
            header(action :mk php").
        }
 }
  IF(isset ($-Post)(mk-edit)){
   $kode = $-Post {'kode']:
   $ nama = $- Post [nama]:
   $sql = "UPDATE Mk SET nama ! $nama' where kode = $kode :
   IF(!con → quary ($sql){
    die(edit mhs gagal):
   }
   ase ?
       header (action= mk Php));
   }
   IF(ISSEL ($-POST ('mk-delete]
    $kode = $-POST [kode];
    $sal = Delete from mk where kode'$kode'n;
   If (!con → query ( isll )}
     die (hapus Tahun kode mk gagal);
   }
   else { leader (action :me.olie);
   }
??}
```

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File PHP menampilkan data dengan nama ta.php

```
<?PHP
    include'koneksi.PHP';
    include'index.PHP';
?>
<!DOCTYPE html:
<html>
<head>
</title>Tahun akademik<1title>
<head>
<body>
    <h2 align="center"> tahun akademik </h2>
    <a herf="ta.PHP">lihat</a> |<a herf="ta_add_PHP"> tambah<1a>
    <table width,100% border">
    <thead>
      <dr><th width =2%>no</th>
          <th width =5%>sct</th>
          <th width =15% ID</th>
          <th width = 25% >nama<th>
      <tr>
  </head>
  </body>
      <?PHP
      $sql= "select "From ta"
      $res =$conn →query ($sql):
      IF (arcs→ num rows :0){
      $ I =0;
      while ( $dat cres→ fet- assoc()){
      {(tt)
      echo"<tr align :'center'>
          <tr> PI </td>
          <td><a hrEF = 'ta detail. PHP ?id;
              dat</a>
          </td>
          <td> "$doc 'id']." </td>
          <td>". $ doc [nama]." <add>
          <br>"1

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

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File PHP untuk menambah dengan nama ta_add.php.

```
<!DOCTYPE html>
<html>
<head>
<title> Tahun akademik add </title>
<head>
<body>
    <a herf = "ta.php">title (C)|<a herf = "ta-add"> tambah (H<a>
    <br>
    <Form name ="myForm" action ="ta.proc.php" method="post">
    ID<br>
    < input type ="text" name = aed" id= "id">
    <br>nama <br>
    < input type = "submit" name="ta-add" id = ta-add"
    < .form>
<body>
</html>
```

File mhs untuk mengetik data dengan nama ta dengan PHP

```
<?PHP
    include 'koneksi.PHP'
        $id=$-GET[id];
        $sql ="select from ta where id='[id'];
        $res = $conn → query ($sql);
        $dat = $res →Fetch -asso();
?>:
<DOCTYPE html>
<html>
<head>
<title> ta edit </title>
</head>
<body>
    <a href= ta.php">lihat (a)|<a hrel= ta-add .php> tambah 2/a>
    <br>
    <From name="MY Form "action, ta-proc.php "method" post ">
    ID <br>
    <name type:"text "name :"id "id = "nama" size=30 text <?=$dat [name]>>
    <input type:"submit "name=ta-edit "id= "ta edit "value= "Perbaris">
    < input type: "submit "name = ta delete id ta-delete"value"Hapus >
    </form>
</body>
</html>
```

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File PHP untuk memproses data dengan nama ta.proc.php. 2013030068

```
<?PHP
    include 'koneksi PHP';
    IF (isset($_POST['ta=add']))
    $Id = $_Post(Id);
    $ nama = $_Post (nama);
    $stl = "insert into . ta (id, nama);
            Value ('id', $nama);
      IF (!conn → query (ssql)) {
      die ('tambah mhs gagal);
    }
    else {
        header ("Location : ta.PHP);
    }

    IF USser(S_Post[ta_edit]{
    $ Id_ Post ['id];
    $nama = $_Post [name];
    sql = Update . ta SET nama = '$nama' WHERE '$Id';
    IF}conn → query(sql))}
     die (edit ++ gagal);
    }
    Cesse{
        header colocation.ta.PhP>
    }
}
IF (isse ($_Post ['ta_delete]))
$ Id = $_Post ['id'];
$ sql = $ DELETE FROM ta delete id:$ Id;
IF USconn → query ($sql)) {
die 'hapus TA gagal);
}
Ase {
   header ("Location : ta.PhP");
  }
}
?>
```

Dipindai dengan CamScanner

File PhP menampilkan data dengan nama krs.php 2013030068

```
<? PhP
    include 'koneksi Php;
    include 'index . Php;
?>
<! DOCTYPE HTML>
<HTML>
<head>
<title> krs </title>
<head>
<body>
        <h2 align="center">KRS</h2>
        <a herf="KRS.PhP">LIHAT</a> |<a hem="KRS-add.PHP">d itambah</a>
        < table width:'100% border:'1'>
        <! head>
        <th> <th width = '20% >NO </th>
                <th width = '5 %>act</th>
                <th width = '5%>ID</th>
                <th width = '15%>mhs</th>
                <th width = '5%>mk-kode</th>
                <th width = '5% >sem</th>
                <th width = '5% >ta-id</th>
                <th width = '5% >Nilai</th>
 <tr>
 </thead>
 <t body>
        <?PhP
          $sql =Select from krs ">
          $ res = $conn→query($sql):
        IF (res → num rows >0){
          $ i=0;
while ($dat = $res → retch -assoc()){
                $i++;
 <cho "ctr align = 'center'>
 <td >$i</td>
 <td><a heel=krs- detail .PhP ?id= $ dat [id].dat</a></id>
 <td> "$ dat ["id"], "</td>
 <td>" $dat [mhs-nPm"] </td>
 <td> "mhs kode"]</td>
 <td> " dat [sem"]</td>
 <td>"$dat [ta-id"] </td>
 <td>"$dat ["nilai"]- "</td>
 </td>":
```

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```
}
}

}
</body>
</table>
</body>
</html>
```

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File untuk menambah data dengan nama KRS.add.PHP. 2013030068

```
<?php
    include koneksi.php"
?>
<!DOCTYPE
<html>
<head>
<title KRS</title>
<body>
    <h2>Tambah Data KRS</h2>
    <a href="KRS.PHP">Lihat</a>|<a herf="KRS_add.PHP">Tambah</a>
    <br>
    <Form action="KRS-Proc-PHP" method="POST">
     ID<br>
    <input type="text" name="Id"><br>
     mhs-npm <br>
    <select name="mhs-npm">
    <?php
     $sql = select * from mhs";
     $res = $conn → query ($ sql);
    while ($brow = $ res = fech-array (MY SQL-BOTH)){
    echo "<option value = $rows [kode]" " $rows ["nama]"<OPTION>;
     }
?>
<select><br>
sem<br>
<input type "text name = "ta-Id>
    <?php
      $sql = "Select "from ta";
      $res = $conn → query (sql);
    while ($rows = $ res → fetch-array (MY sal-BOTH)){
    echo " caption value = "rows (Id)" > " $ rows [ name] = "< caption>"
     }
</body>
</html>
```

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File PHP mengedit data KRS dengan nama KRS.detail PHP 2013030068

```
<?PHP>
    include koneksi PHP;
    $ id=GET['id']:
    $sql="select *from KRS where id=[id]:"
    $ res= $ conn → query ($sql]:
    $ row = $res → fetch -array (mysql-Both):
?>
<!DOCTYPE html>
<html>
<head>
<title>krs</title>
</head>
<body>
    <h2>KRS edit</h2>
    <a herf="KRS.PHP">Lihat</a> |<a herf="KRS-add.PHP">tambah</a>
    <br>
    <From action="KRS_Proc.php"method="Post">
    ID<br>
    <input type="text" name="Id" value="<?=$ row [Id]?">"
    <br>mhs_npm 2br>
    <select name="mhs-APM">
    <?php
      $sql="select"from mhs:
      $ rcs = $conn →query ($sql);
   while ($mhs =src → secn_array(mysql.Bot)){
      if ($mk ['kode'] = $row ['mo_kode'])
          $ select = select = "selected"
      else
       $ select="
  echo "<option value>"$mk ["kode"]-"$ mk [nama]"
        </option>"
   }
?>
sem <br>
<input type="text name="sem" value="<?=$row ['sem']?"><br>
```

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```
ta-Id<br>
< Select name = "ta-Id"
<?PHP
    $ sql = " Select * From ta";
    $ res = $ conn ->query (sql):
    while = ($ta = $ → (( tch -array (mysql- Both)) }
    IP ($ta ['Id '] = $ row ['ta Id']
    $ Select , 'selected = 'selected!
use
$ Select = "
echo " < Option value = "- $ table [Id] '[select] " $ ta [nama] "</option>"
  }
  ?>
</Select ><br>
nilai<br>
<input type = "text "name = "nilai " value" = ?row [nilai] > "<<br>
<input type = "Submit "name " krs "edit value = "PERBARUI "
<input type = "Submit" nam " krs Delete "value = "HAPUS"
on klik = " rekum confirm ( Yakin menghapus Data ini ?)">
< /Form
</body>
</html>
```

Dipindai dengan CamScanner

File PHP memproses data dengan nama krs-proc-PHP. 2013030068

```
<?php
  include 'koneksi PHP
  IF (isset ($post['krs.add'])) {
  $Id = $ POST ['Id'];
  $mhs-npm = $-post [mhs-npm];
  $ mic-kode= $-post (mic-kode'];
  $ sem = $post ['sem'];
  $ta-id = $post ['ta-id]
  $nilai  = $ post ['nilai']
sql = insert into krs (Id, mhs, NPM, Mk, kode, sem, Id. nilai) value
   ($Id:'$mhs, $NPM, $mk. kode, sem, ta-id nilai).
IF ($ conn  query ($ sql) {
  die (tambah krs gagal);
}
header action :("krs.php")
?>
```

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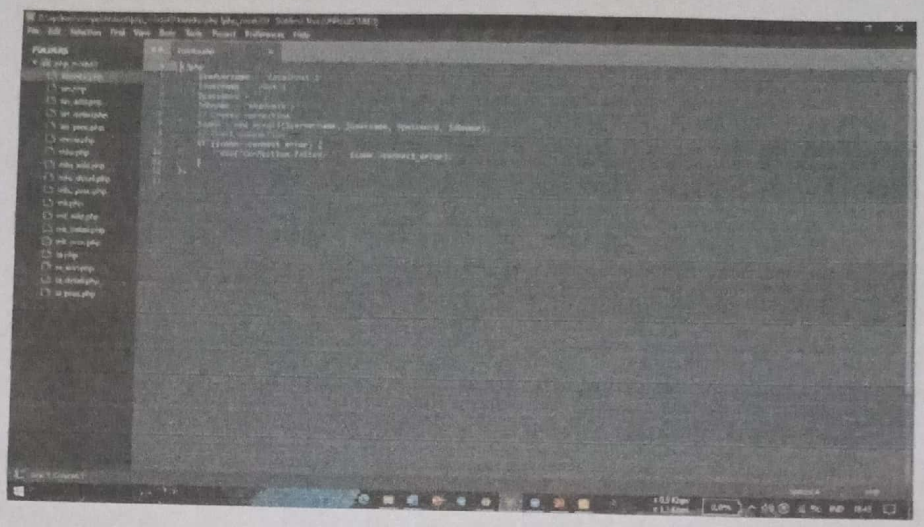
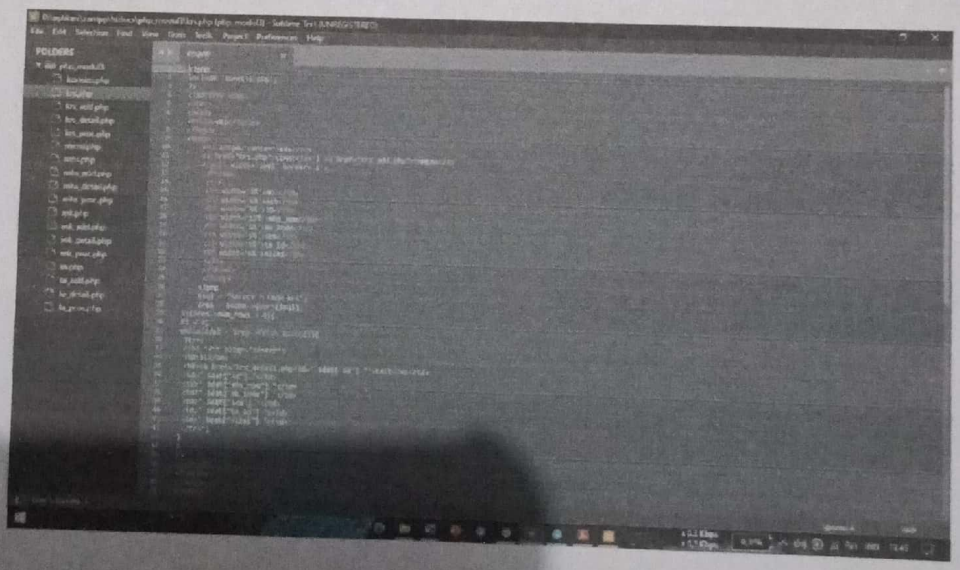
III

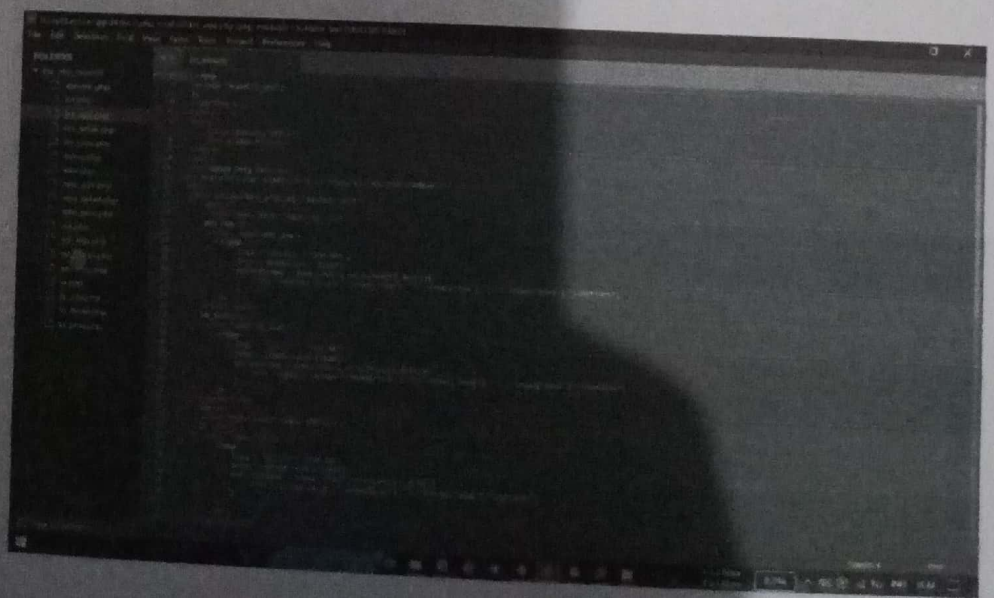
TAMPILAN PROGRAM

Tampilan program koneksi



Tampilan program krs





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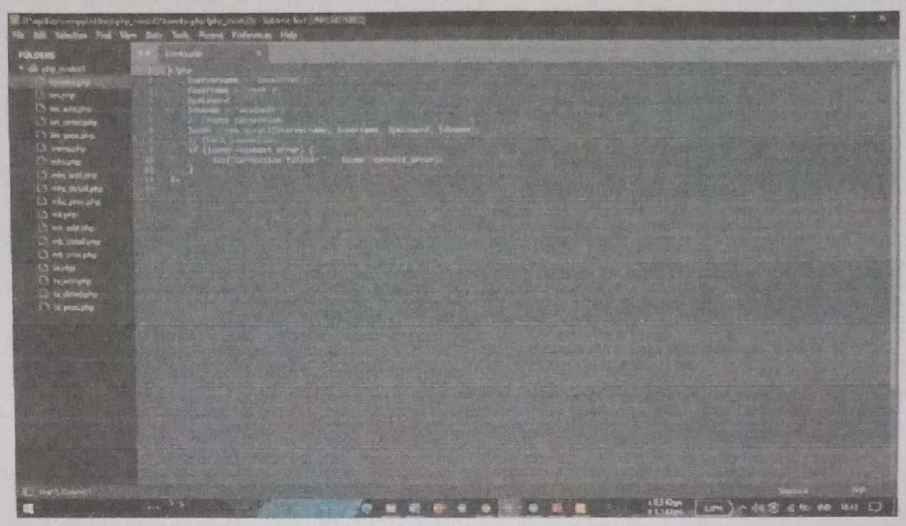
III

TAMPILAN PROGRAM

Tampilan program koneksi



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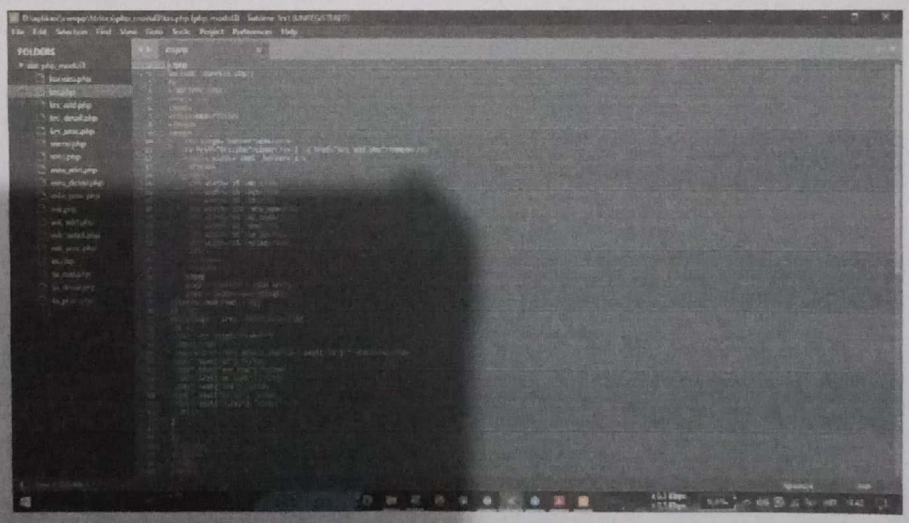

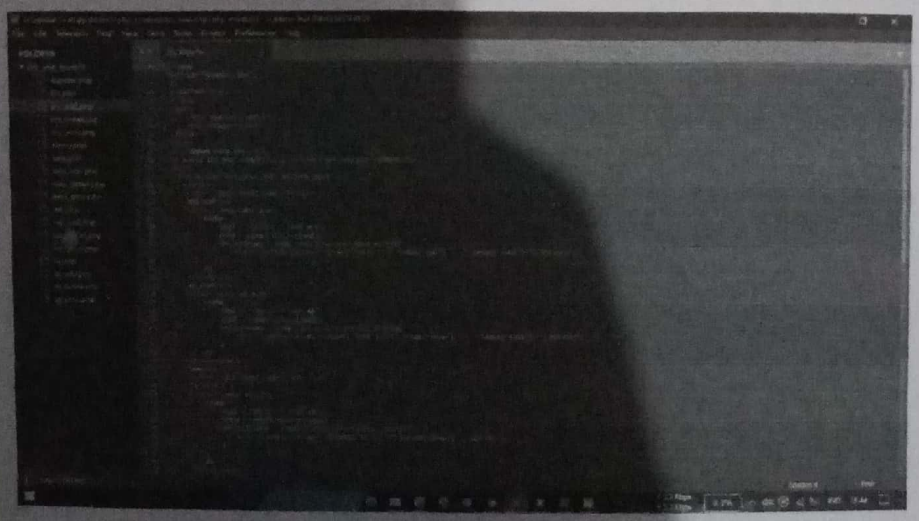

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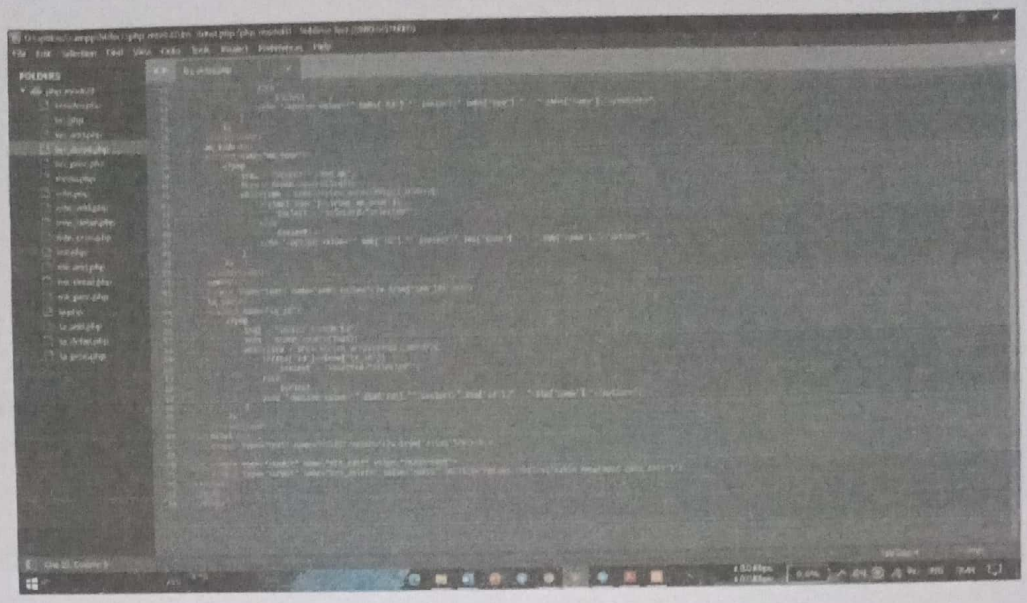

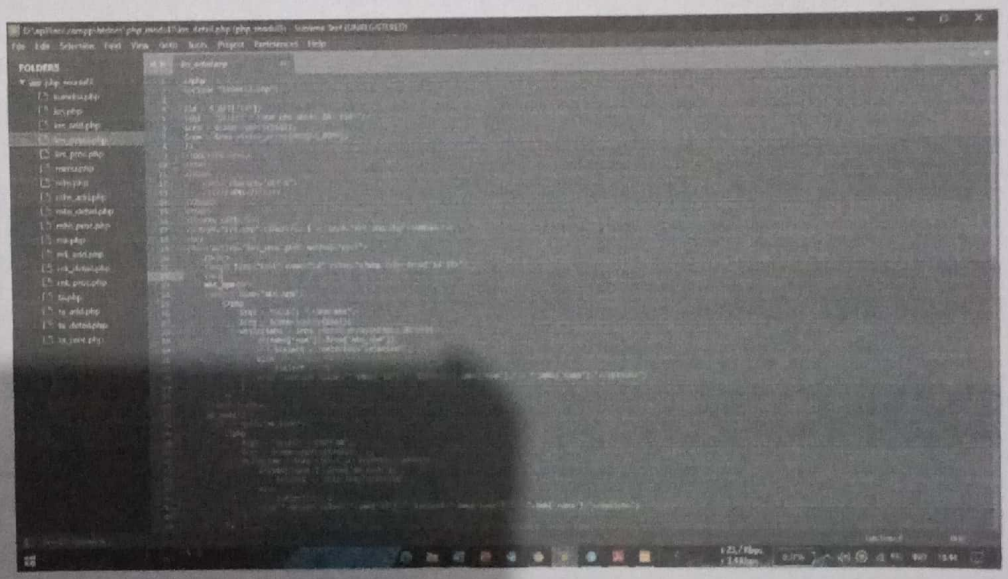

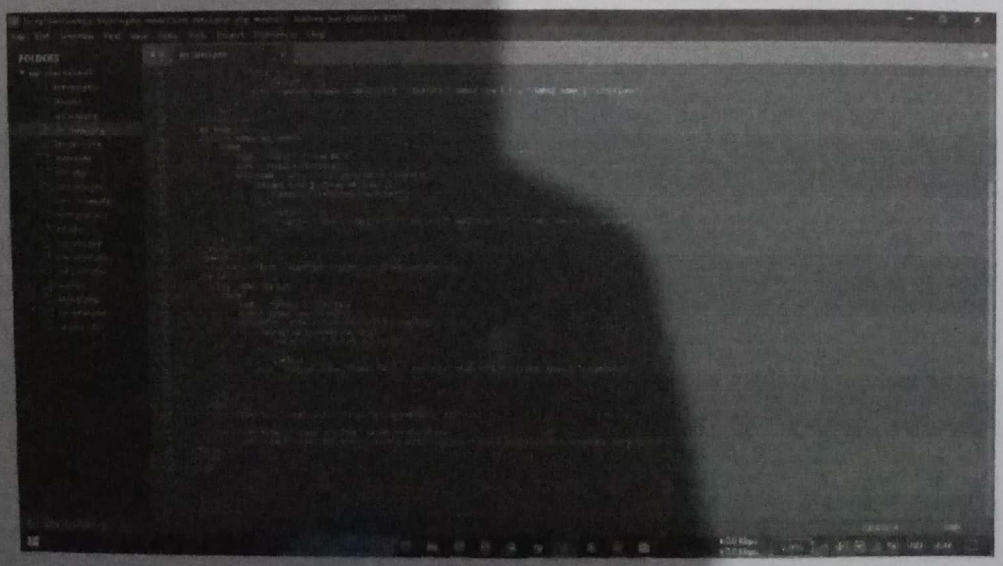

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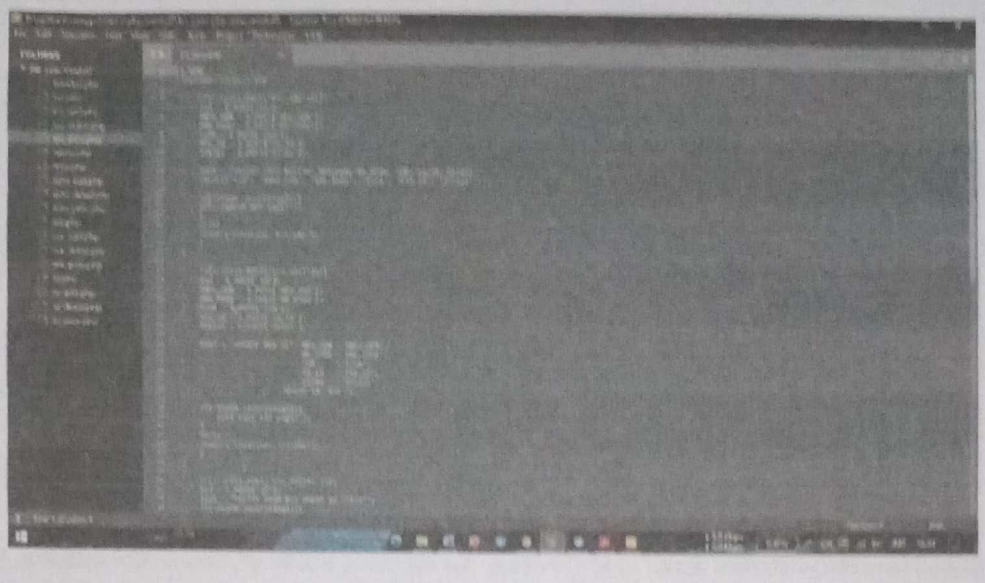
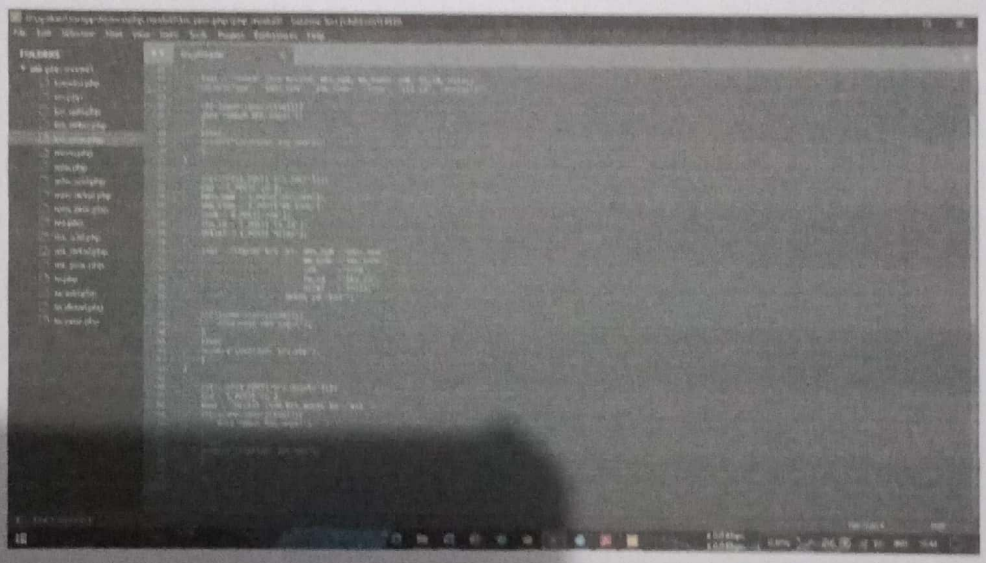
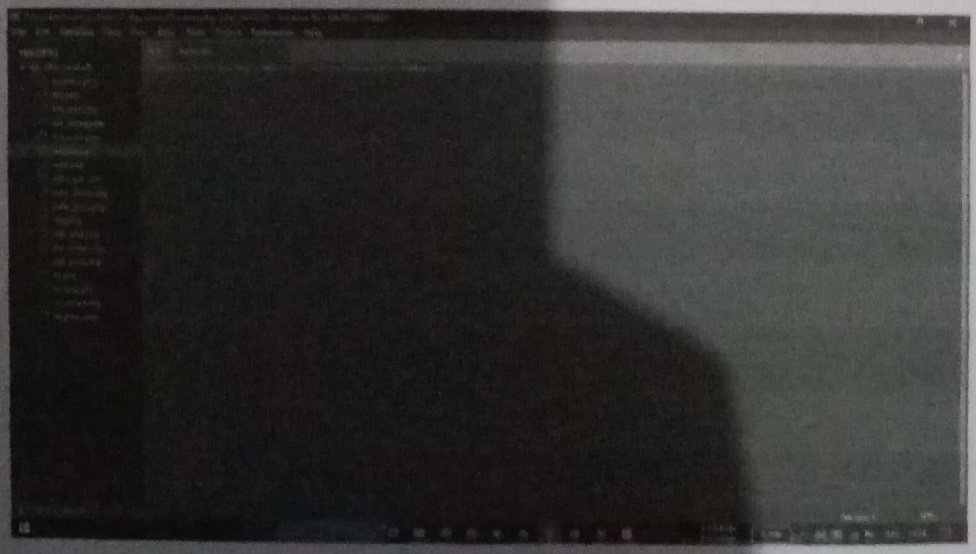




Tampilan menu



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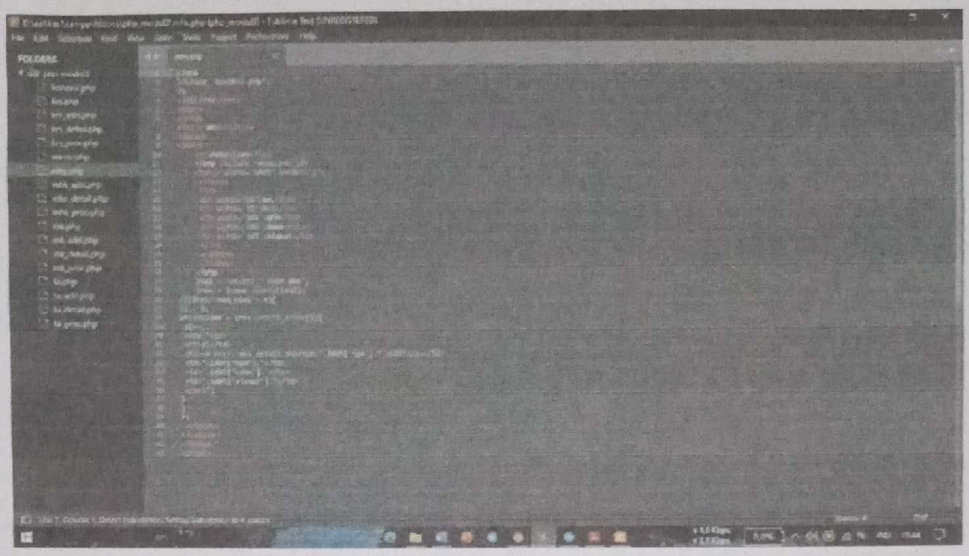
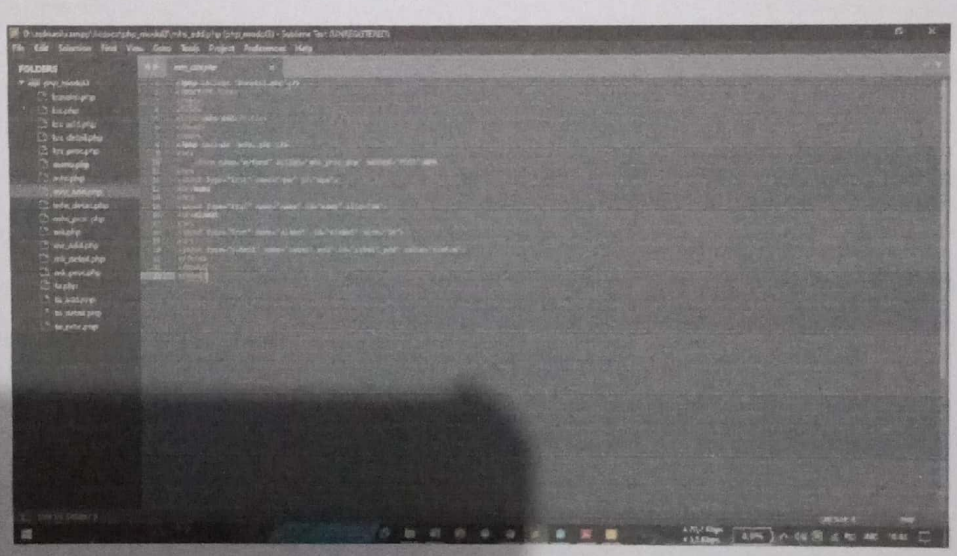
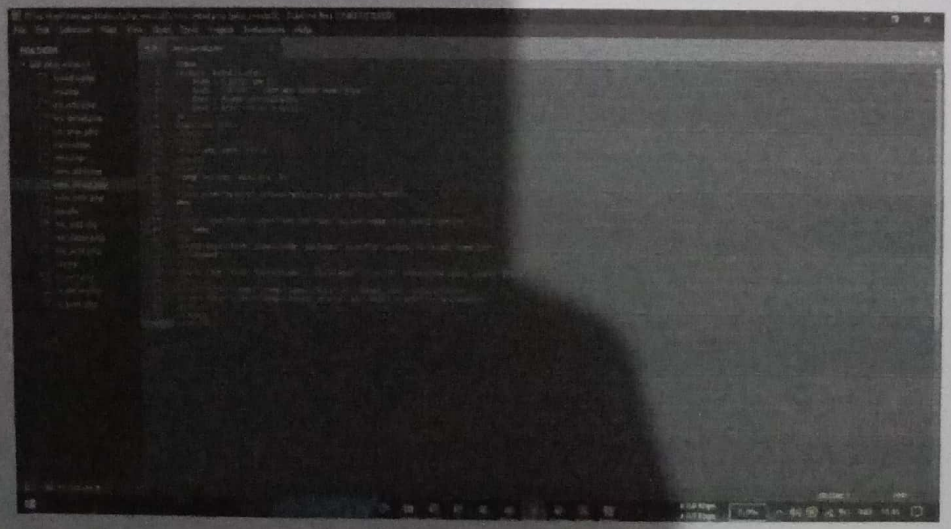
Tampilan mhs







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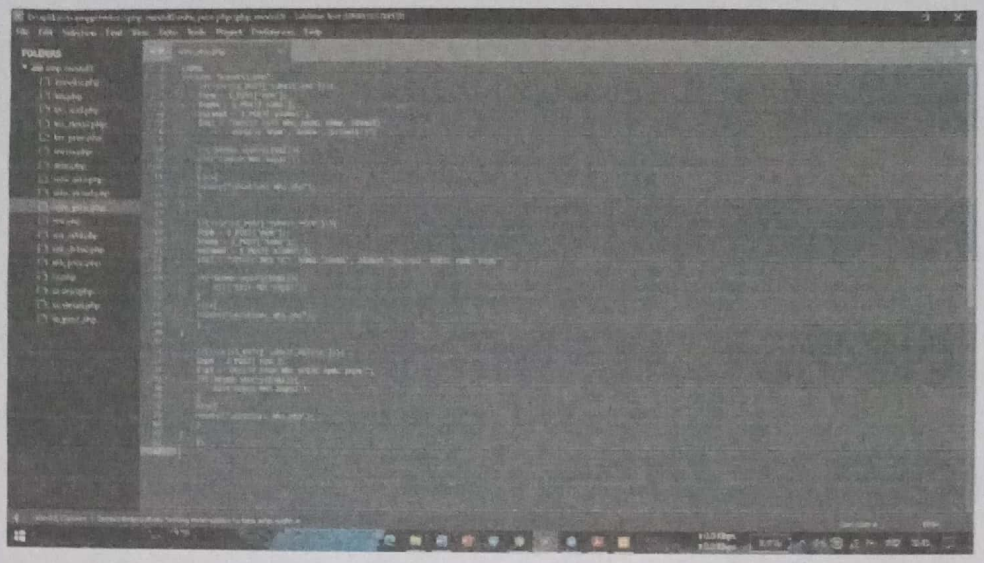
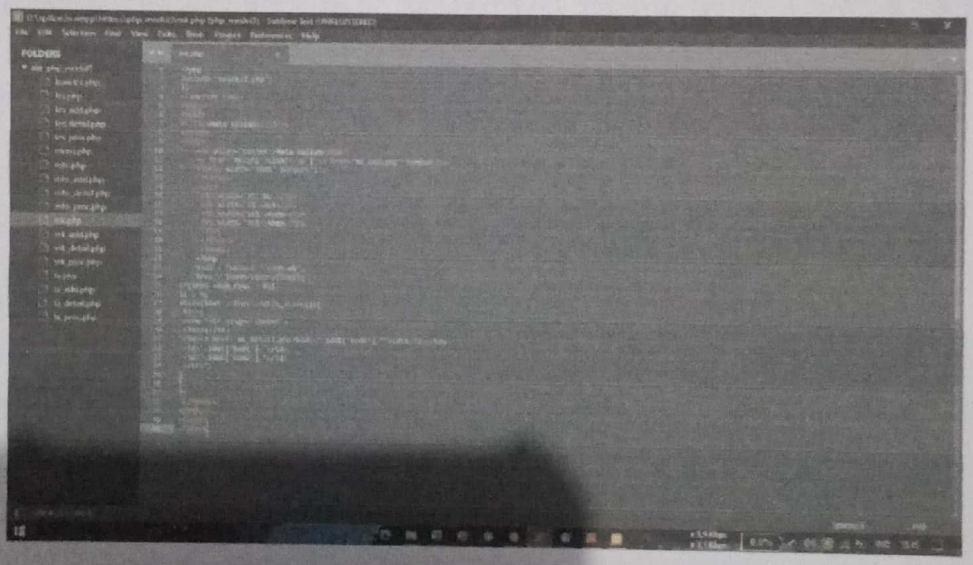
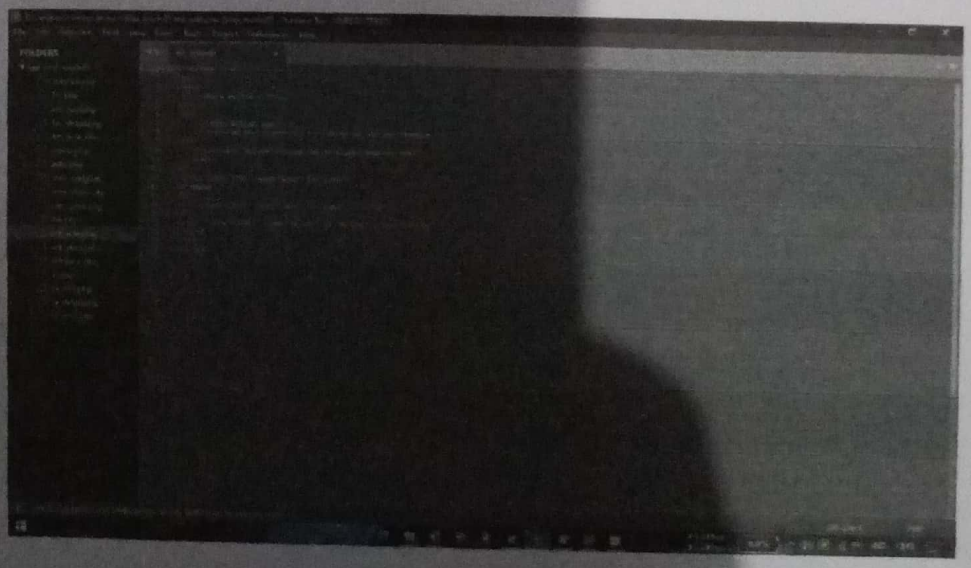


Tampilan program mk





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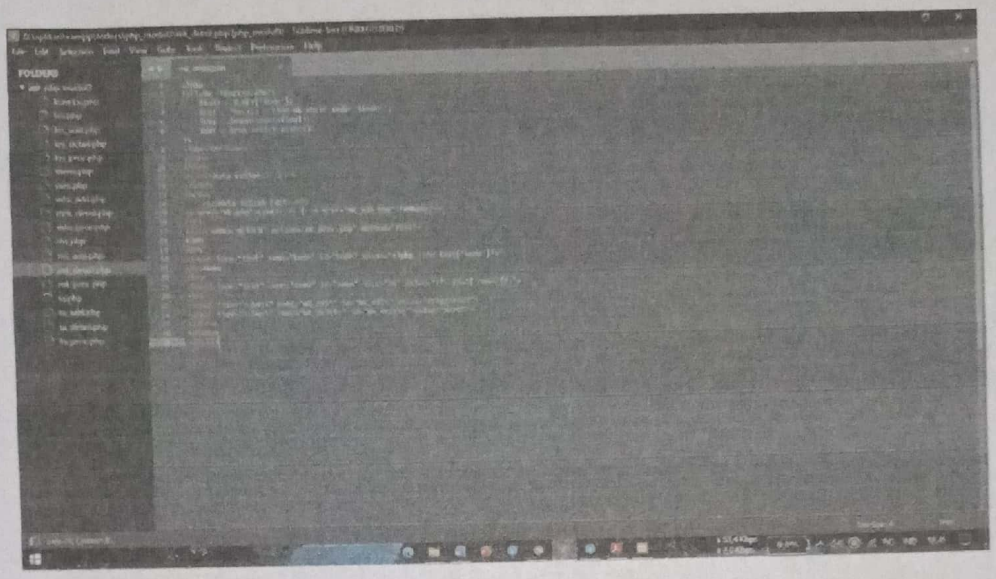
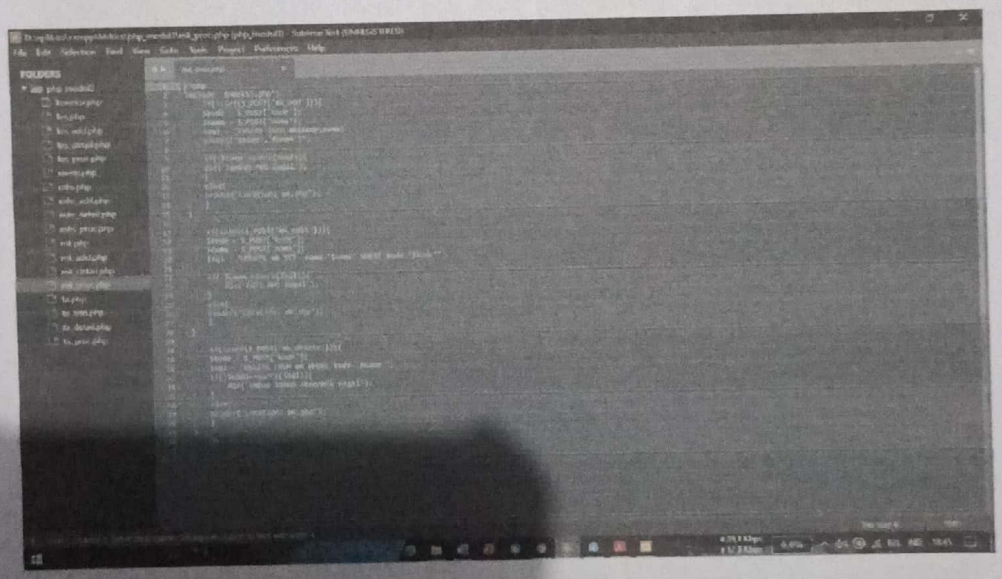
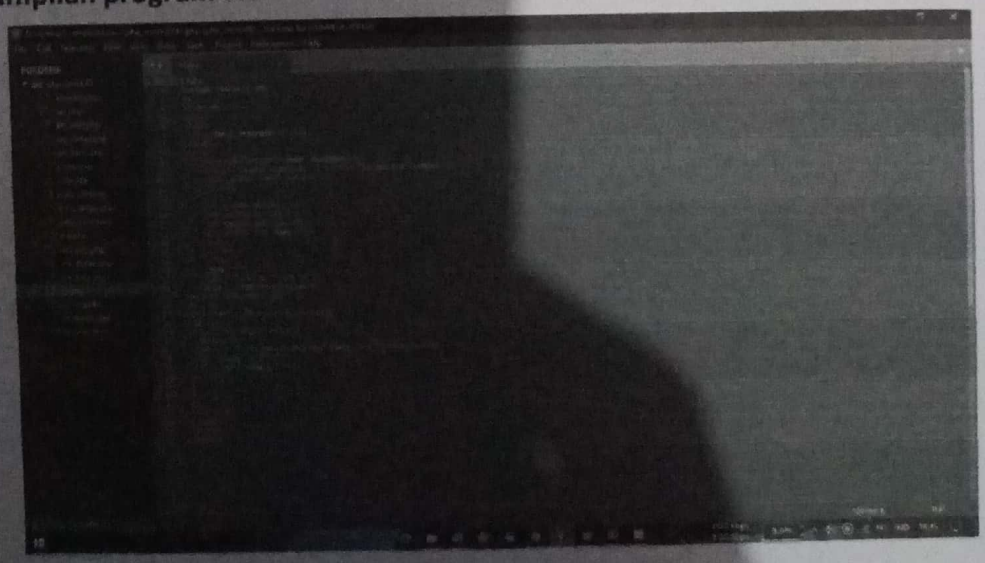




Tampilan program TA



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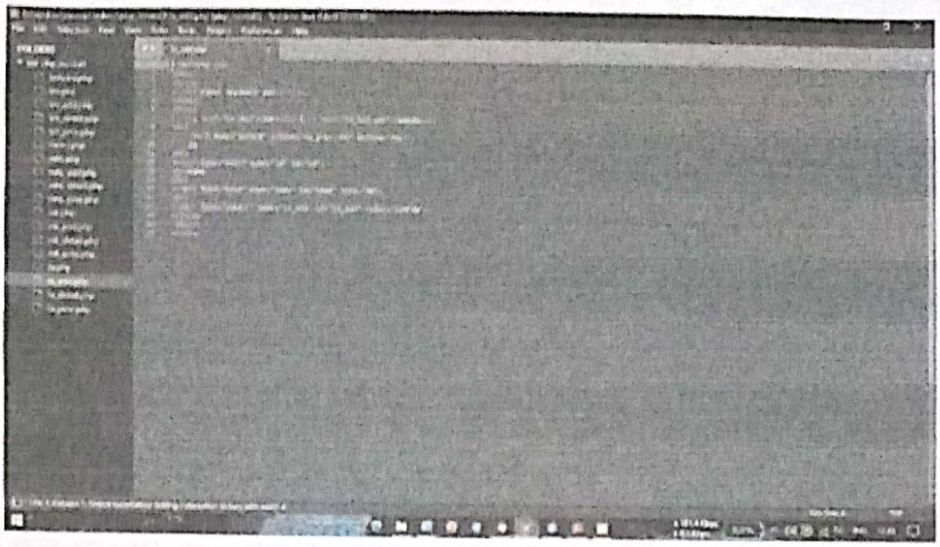

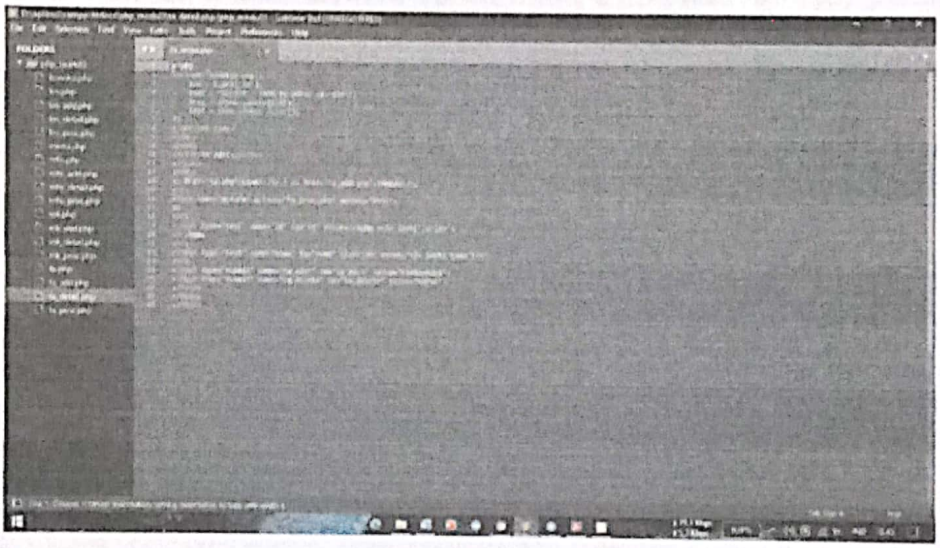

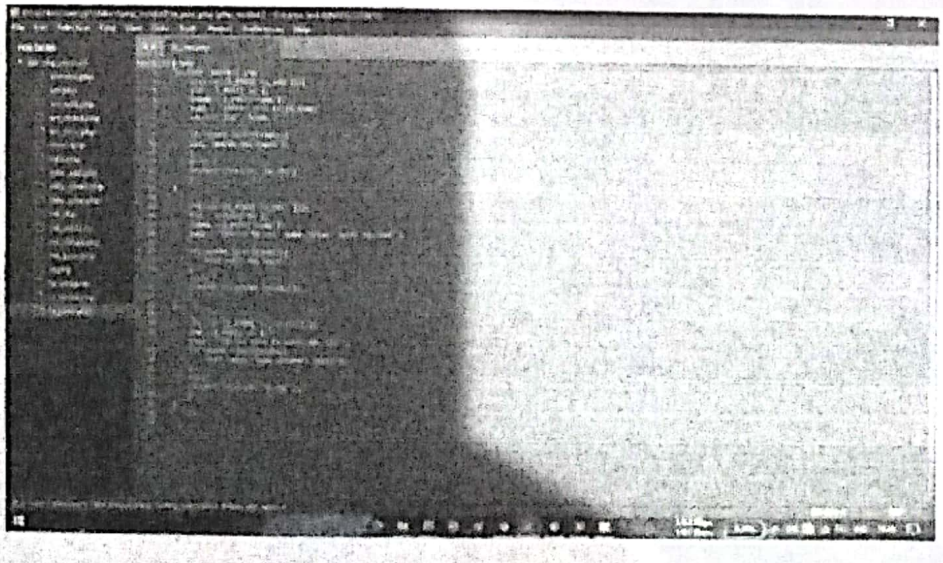

Dipindai dengan CamScanner

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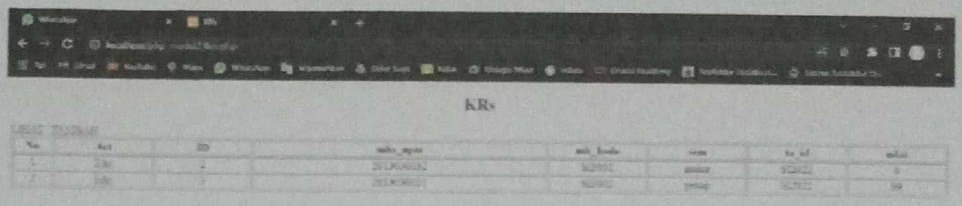
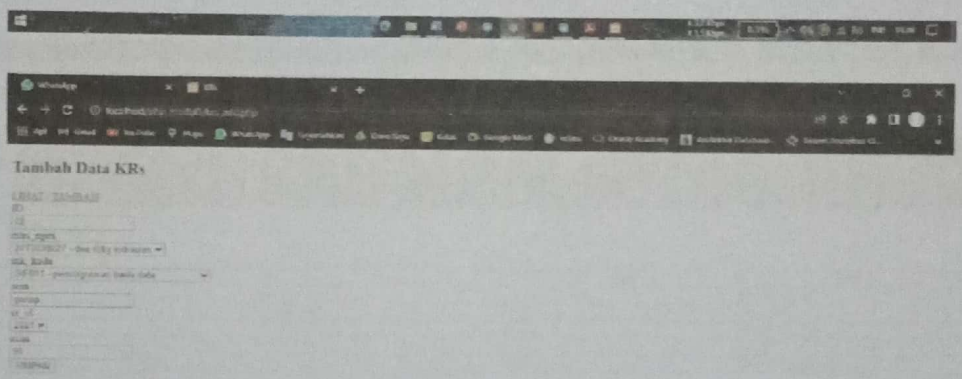
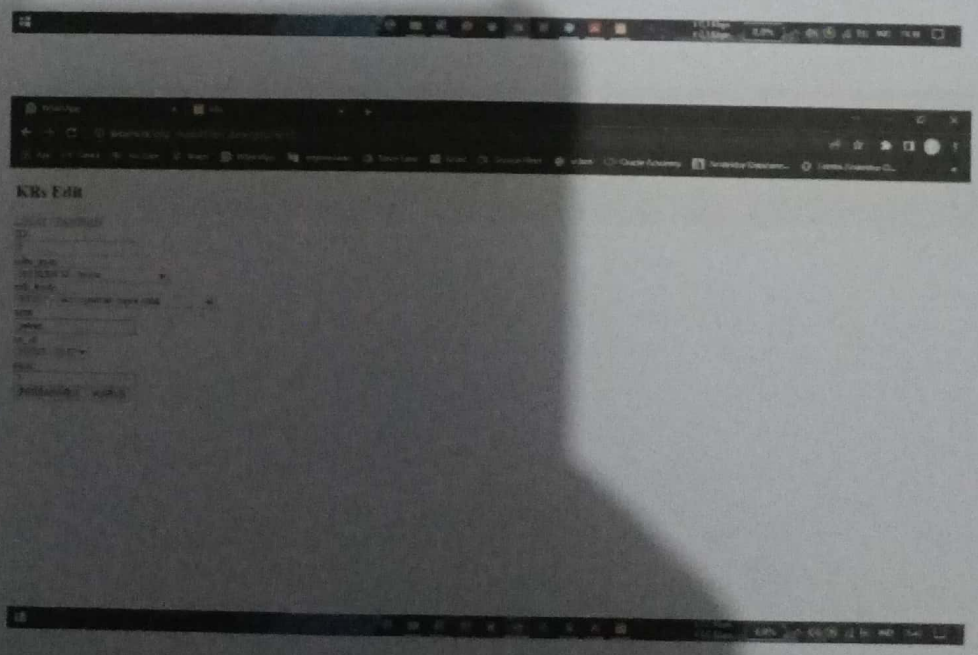
Tampilan krs,krs add,krs edit







Dipindai dengan CamScanner

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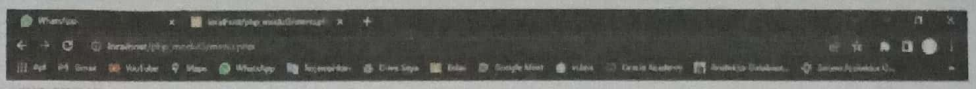
Tampilan menu



LIHAT / TAMBAH

Tampilan mahasiswa,mahasiswa add,mahasiswa edit

Mahasiswa

LIHAT / TAMBAH

No.	Act	NPM	Nama	Alamat
1	Edit	2013030027	[illegible]	jl agolot gg 9
2	Edit	2013030029	[illegible]	[illegible]
3	Edit	2013030032	[illegible]	kediri
4	Edit	2013030054	[illegible]	[illegible]
5	Edit	2013030057	[illegible]	jl [illegible] [illegible]

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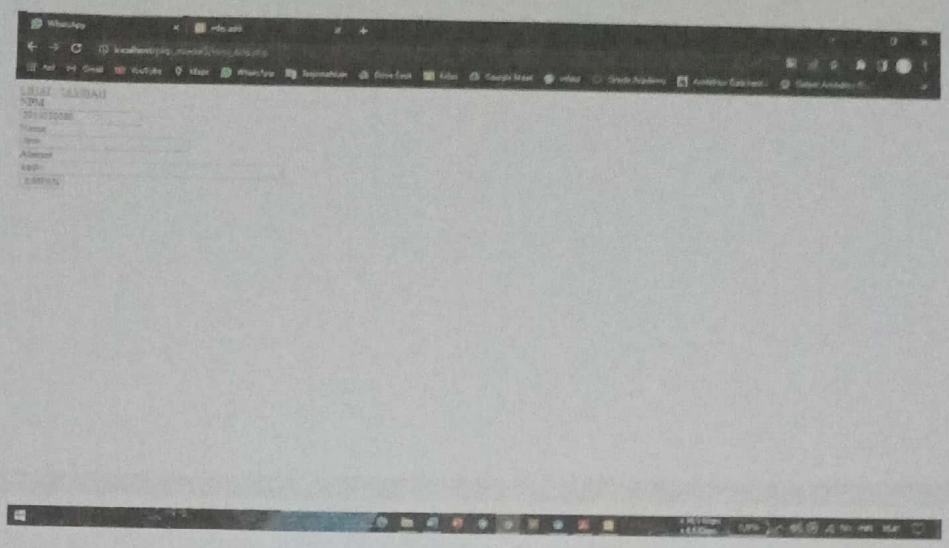
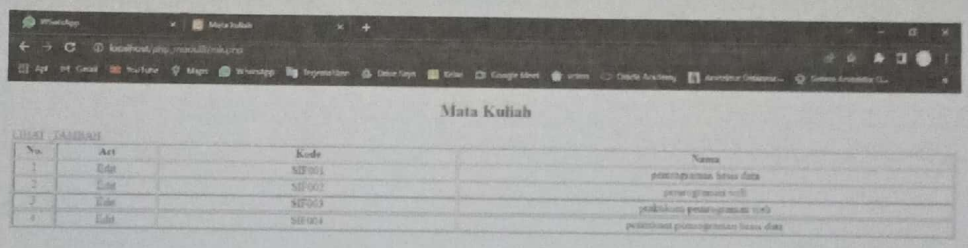
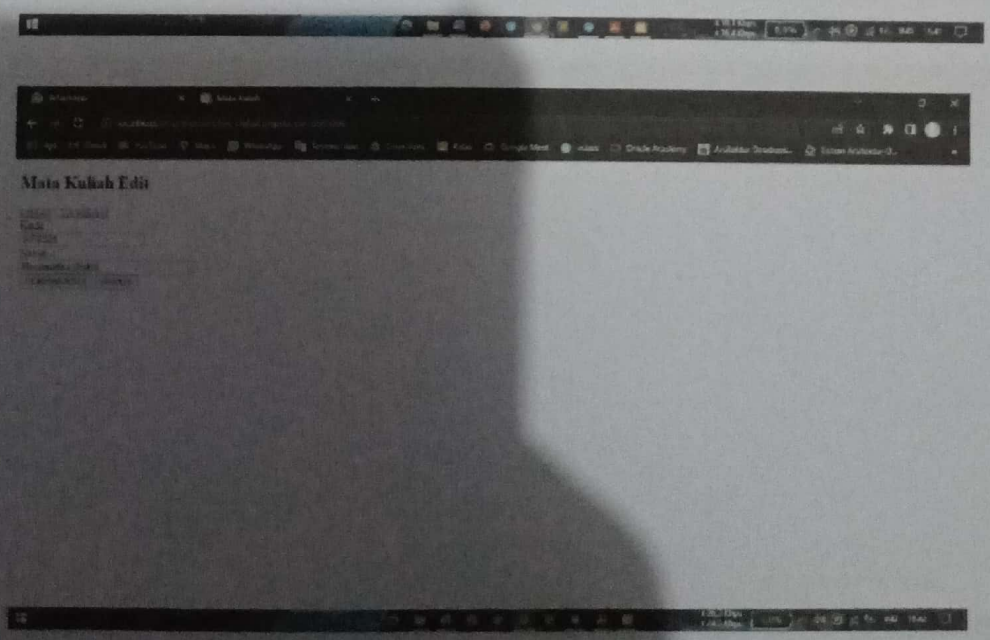


Tampilan mk,mk add,mk edit





Dipindai dengan CamScanner

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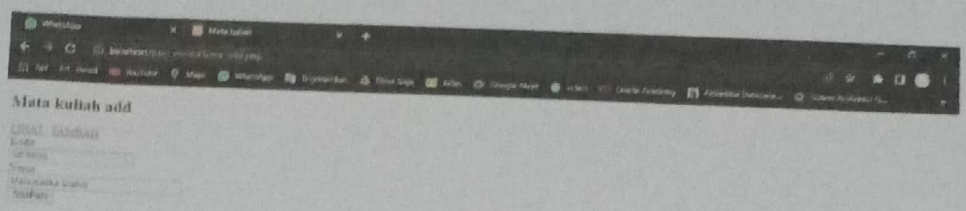
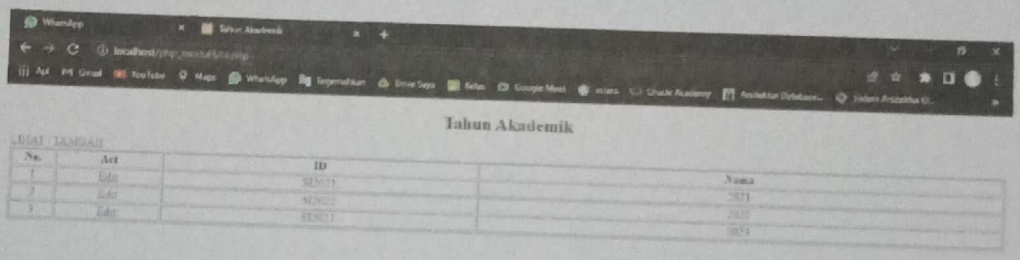


Tampilan TA, TA add, TA edt



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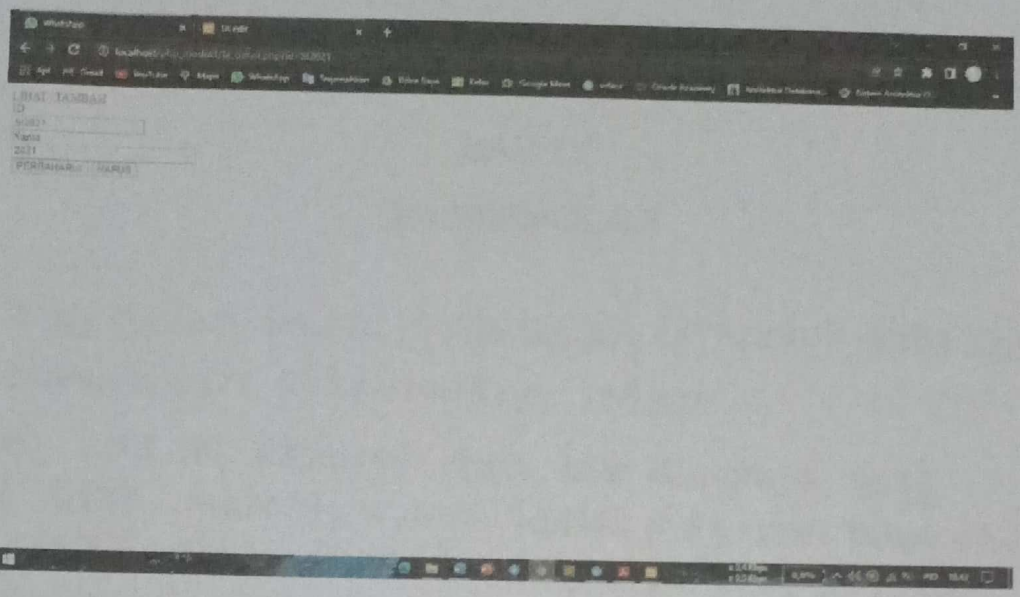

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BAB IV

KESIMPULAN

MYSQL merupakan teknik pengaksesan terhadap data base.
MYSQL merupakan perkembangan terbaru
Praktikum kali ini membuat data base akademik yang memiliki tabel mahasiswa, mata kuliah, KRS, dan tahun akademik masing masing tabel memiliki hubungan yang beraturan.

→ untuk tabel mahasiswa berelasi dengan tabel KRS. gunanya untuk memasukan data mahasiswa menggunakan NPM sebagai primary key

→ untuk table mata kuliah berelasi dengan tabel KRS. Berguna untuk menambahkan data mata kuliah

→ untuk tabel tahun akademik berelasi dengan table KRS berguna untuk menambahkan tahun ajaran pada KRS.

Dipindai dengan CamScanner