

## LAMPIRAN 1

### 1. Connect.php

```
<?php  
mysql_connect('localhost', 'root', '') ;  
mysql_select_db('asdos') or die('database tidak ditemukan');  
?>
```

### 2. Index.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
    <title>Sistem Pendukung Keputusan | SELEKSI ASDOS PRAKTIKUM T.INFORMATIKA  
UMG</title>  
    <meta name="keywords" content="" />  
    <meta name="description" content="" />  
    <meta http-equiv="content-type" content="text/html; charset=utf-8" />  
    <meta http-equiv="content-language" content="" />  
    <link href="style.css" rel="stylesheet" type="text/css" />  
</head>  
  
<body>  
    <div id="page">  
        <div id="header">  
            <h1><a href="#">Sistem Pendukung Keputusan</a></h1>  
            <p id="subtitle">SELEKSI ASDOS PRAKTIKUM T.INFORMATIKA UMG</p>  
        </div>  
        <div id="menu">  
            <ul>  
                <li><a href="index.php">Beranda</a></li>  
                <li><a href="index.php?menu_index=login">Login</a></li>  
            </ul>  
        </div>  
        <div id="main">  
            <div id="sidebar">  
                <div id="login">  
                    <h2>LOGIN</h2>  
                    <div class="box2">  
                        <form method="post" action="#">  
                            <p class="txtleft"><?php  
if(isset($_GET['menu_index'])){  
    $menu_index = $_GET['menu_index'];  
    include_once($menu_index.".php");  
}
```

```

?></p>

        </form>
    </div>
</div><!-- login -->
<!-- box -->
</div><!-- sidebar -->
<div id="content">
    <div id="contheader">
        <h2>selamat datang..!!</h2>
    </div>
    <div id="content2">
        <div class="post">
            <h2><a href="#">Aplikasi Sistem pendukung keputusan
seleksi asisten dosen praktikum di T.Informatika UMG</a></h2>

            <div class="entry">
                <p>Aplikasi ini dibuat untuk mempermudah dalam
menyeleksi asisten dosen praktikum di teknik informatika UMG selain itu agar
sesuai dengan tarjet yaitu nilai matakuliah dan praktikum yang pernah diikuti
nilai minimum 70, mahasiswa yang mengikuti seleksi asisten dosen praktikum
harus mengikuti tes coding, mempersentasikan materi dan interview yang sudah
disiapkan oleh dosen penanggung jawab untuk mengetahui seberapa besar
pemahaman mahasiswa dalam menjalankan coding dan memahami materi pemograman
web.</p>
                <p> Dalam pembuatan aplikasi sistem pendukung keputusan seleksi asdos
praktikum ini menggunakan Fuzzy Multiple Attribute Decision Making (FMADM)
dengan metode Technique for Order Preference by Similiarity to Ideal Solution
(TOPSIS) .</p>
            </div>
        </div><!-- post -->

        </div><!-- post -->
    </div><!-- content2 -->

    </div><!-- content -->
    <div class="clearing">&nbsp;</div>
    <div id="footer">
        <p>Copyright &copy; 2011, designed by <a
href="http://www.webtemplateocean.com/preview/behindthetree/">WebTemplateOcean
.com</a></p>
    </div>
</div><!-- main -->
</div><!-- page -->

```

```
<div style="text-align: center; font-size: 0.75em;">Design downloaded from <a href="http://www.freewebtemplates.com/">free website templates</a>.</div></body>
</html>
```

### 3. Login.php

```
<?php
error_reporting(0);
session_start();
include_once("connect.php");
if(!isset($_POST['Login'])){
if(isset($_GET['pesan'])){
$pesan = $_GET['pesan'];
}
else $pesan = "";
?>
<BR><div style="">
<div style=""><?php echo $pesan; ?></div>
<FORM METHOD="POST" ACTION="">
<TABLE style="border:none">
<TR>
<TD width=20%><FONT SIZE="4" COLOR="#FFFFFF">Username</font></TD>
<TD width=5%>=</TD>
<TD><INPUT TYPE="text" NAME="user"></TD>
</TR>
<TR>
<TD><FONT SIZE="4" COLOR="#FFFFFF">Password</font></TD>
<TD>=</TD>
<TD><INPUT TYPE="password" NAME="password"></TD>
</TR>
<TR>
<TD ALIGN="CENTER"></TD>
<TD colspan=3 width=4%><BR>
<INPUT TYPE="submit" value="Login" name="Login" />
<INPUT TYPE="Reset"><a href="index.php?menu_index=daftar_login"><BR><I>REGISTER</I></A>
</TD>
</TR>
</TABLE>
</FORM>
</div><BR><BR>
<?php
}
```

```

else
{
    $username= $_POST['user'];
    $password= $_POST['password'];
    $sql = "SELECT * FROM login WHERE Username = '". $username ."' AND Pass =
'". $password ."'";
    $q = mysql_query($sql);
    $row=mysql_fetch_array($q);
    if (mysql_num_rows($q) > 0){
        $_SESSION['USER'] = $username;
        if ($row["Status_Login"] == "admin"){
            echo "<script>
                window.location.href='admin/home.php';
            </script>";
            // header("location:admin/home.php");
        }
        else {
            echo "<script>
                window.location.href='home_user.php';
            </script>";
            //header("location:home_user.php");
        }
    }
    else {
        echo "<script>
            window.location.href='index.php?menu_index=login&pesan=Username
atau password salah' ;
        </script>";
        // header("location:index.php?menu_index=login&pesan=Username      atau
password salah ");
    }
}
?>

```

#### **4. View\_login.php**

```

<BR><table class='data'>
<tr bgcolor="#990000 >
    <td align="center"><B>Username</B></td>
    <td align="center"><B>Password</B></td>
    <td align="center"><B>Alamat</B></td>
    <td align="center"><B>Tempat Lahir</B></td>
    <td align="center"><B>Tanggal Lahir</B></td>
    <td align="center"><B>Jenis Kelamin</B></td>
    <td align="center"><B>status</B></td>
    <td align="center"><B>Edit</B></td>
</tr>

```

```

<?php
$data=mysql_query("select * from login");
while($row=mysql_fetch_array($data)){
$tgl=explode("-",$row['Tgl_Lhr']);
echo"
<TR>
<TD>$row[Username]</TD>
<TD><CENTER>$row[Pass]</CENTER></TD>
<td>$row[Tmpt_Lhr]</td>
<TD>$tgl[2]-$tgl[1]-$tgl[0]</TD>
<td>$row[Alamat]</td>
<td>$row[Jenis_Kelamin]</td>
<TD>$row[Status_Login]</TD>
<TD width=10><CENTER><A
HREF=\"home.php?menu_home=edit_login&Username=$row[Username]\"><img
src=\"../images/edit.ico\"></A></CENTER></TD></TR>
}
?>
</TABLE>
</CENTER>
</FORM>

```

##### **5 . Home.php**

```

<?php
session_start();
include_once("../connect.php");
IF($_SESSION['USER']){
$menu_home=$_GET['menu_home'];
?>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Sistem Pendukung Keputusan | SELEKSI ASDOS PRAKTIKUM
T.INFORMATIKA UMG</title>
<meta name="keywords" content="" />
<meta name="description" content="" />
<meta http-equiv="content-type" content="text/html; charset=utf-8" />
<meta http-equiv="content-language" content="" />
<link href="style.css" rel="stylesheet" type="text/css" />
</head>

<body>
<div id="page">
<div id="header">
<h1><a href="#">Sistem Pendukung Keputusan</a></h1>

```

<p id="subtitle">SELEKSI ASDOS PRAKTIKUM T.INFORMATIKA UMG</p>

</div>

<div id="menu">

<ul>

<li><a href="home.php">Beranda</a></li>

<li><a href="home.php?menu\_home=alur\_sistem">Alur Sistem</a></li>

<li><a href="..../logout.php">keluar</a></li>

</ul>

</div>

<div id="main">

<div id="sidebar">

<div id="login">

<h2>Log User</h2>

<div class="box2">

<ul>

<li><a href="home.php?menu\_home=view\_login">DATA USER</a></li>

</ul>

</div>

</div><!-- login -->

<div class="box">

<h2>Main Menu</h2>

<div class="box2">

<ul>

<li><a href="home.php?menu\_home=view\_daftar\_mahasiswa">Master Mahasiswa</a></li>

<li><a href="home.php?menu\_home=view\_kriteria">Kriteria Mahasiswa</a></li>

<li><a href="home.php?menu\_home=view\_batas\_himpunan\_fuzzy">Batas Himpunan</a></li>

</ul>

</div>

</div><!-- box -->

</div><!-- sidebar -->

<div id="content">

<div id="contheader">

<h2><?echo "Selamat Datang";?></h2>

<div id="content2">

<div class="post">

<h2><a href="#"></a></h2>

<p class="postmeta"><?php

```

        if(isset($_GET['menu_home'])) {
            $menu_home = $_GET['menu_home'];
            include_once($menu_home.".php");
        }
    } else{
        include_once('../wellcome.php');
    }
?></p>

</div><!-- content2 -->

</div><!-- content -->

</div><!-- main -->
</div><!-- page -->
<div style="text-align: center; font-size: 0.75em;"></div>
</body>
</html>
<?
}
?>

```

## **6. Daftar\_mahasiswa.php**

```

<FORM METHOD=POST ACTION="query_daftar_mahasiswa.php">
<TABLE width="50%" align="center">
<TR height=1><TD colspan=3 align="center"><FONT SIZE="5" COLOR="#FFFFFF"><B>~:INPUT DATA MAHASISWA:~</B></FONT></TD></tr>
<TR><TD><BR><BR></TD></TR>

<tr>
    <td><FONT SIZE="3" COLOR="#FFFFFF">Nama Mahasiswa</FONT></td>
    <td>:</td>
    <td><input name="Nama_Mahasiswa" type="text"></td>
</tr>
<tr>
    <td><FONT SIZE="3" COLOR="#FFFFFF">Kelas Mahasiswa</FONT></td>
    <td>:</td>
    <td><textarea name="Kelas_Mahasiswa" ></textarea></td>
</tr>

<tr>
    <td>&ampnbsp</td>
    <td>&ampnbsp</td>
    <td>
        <input type="submit" value="Save" name="Save">
        <input type="Reset"></td>
    </td>
</tr>

```

```
</TR>
</TABLE>
</FORM>
```

#### 7. Query\_daftar\_mahasiswa.php

```
<?php
include('../connect.php');
$Nama_Mahasiswa=$_POST['Nama_Mahasiswa'];
$Kelas_Mahasiswa=$_POST['Kelas_Mahasiswa'];
$sql = "INSERT INTO master_mahasiswa (Nama_Mahasiswa, Kelas_Mahasiswa)
VALUES ('$Nama_Mahasiswa', '$Kelas_Mahasiswa')";
$sql_exe = mysql_query($sql);
if($sql_exe) {
    // cek apakah kriteria sudah ada, jika ya tambahkan mahasiswa ini kedalam
    tabel kriteria_mahasiswa
    $sql_kriteria = "select Id_Kriteria from kriteria where jenis='fuzzy'";
    $sql_kriteria_exe = mysql_query($sql_kriteria);
    if(mysql_num_rows($sql_kriteria_exe) > 0){
        // ambil Id_Kriteria dari mahasiswa yang baru saja diinsert ke
        tabel master_mahasiswa
        $Id_Mahasiswa = mysql_result(mysql_query("select max(Id_Mahasiswa)
from master_Mahasiswa"),0);
        // ambil semua Id_Kriteria yang sudah terdaftar
        $value_insert = "";
        while($data = mysql_fetch_array($sql_kriteria_exe)) {
            $value_insert .=
"('".$Id_Mahasiswa."','".$data[0]."'),";
        }
        $value_insert = substr($value_insert,0,strlen($value_insert) - 1);
        // insert ke tabel kriteria mahasiswa, set semua nilai bernilai 0
        $sql_insert = "insert into
kriteria_mahasiswa(Id_Mahasiswa,Id_Kriteria) values ".$value_insert;
        $sql_insert_exe = mysql_query($sql_insert);
    }
    header("location:home.php?menu_home=view_daftar_mahasiswa");
}
else {
echo $sql;
}
?>
```

#### 8. View\_daftar\_mahasiswa.php

```
<script >
function hapus_text(elm){
elm.value = "";
}
```

```

function kembalikan(elm) {
    if(elm.value == "") {
        elm.value = "Masukkan nama mahasiswa";
    }
}
function cari_mahasiswa(){
    var cari_mahasiswa = document.getElementById("cari_mahasiswa").value;
    window.location.href="home.php?menu_home=view_daftar_mahasiswa&cari="+cari_m
ahasiswa;
}
</script>
<div style="margin-left:6% ;padding:4px">
<A HREF="home.php?menu_home=daftar_mahasiswa">Tambah data</A>
<input type="text" id="cari_mahasiswa" value="Masukkan nama mahasiswa"
onblur="kembalikan(this)" onfocus="hapus_text(this)"/><input type="button"
value="cari" onclick="cari_mahasiswa()"/>
</div>
<CENTER><TABLE class='data'>
<tr bgcolor="#CC0000 >
    <td align="center"><B>NO</B></td>
    <td align="center"><B>NAMA MAHASISWA</B></td>
    <td align="center"><B>KELAS MAHASISWA</B></td>
    <td align="center"><B>DETAIL</B></td>
    <td align="center"><B>EDIT</B></td>
    <td align="center"><B>DELETE</B></td>

</tr>
<?php
if(isset($_GET['cari'])){
    $where = " where nama like '%".$_GET['cari']."%'";
}
else $where = "";
$data=mysql_query("select * from master_mahasiswa $where");
$i = 1;
while($row=mysql_fetch_array($data)){
echo"
<TR>
    <TD>$i</TD>
    <TD>$row[1]</TD>
    <TD>$row[2]</TD>
    <TD><CENTER><A
HREF=\"home.php?menu_home=detail_mahasiswa&Id_Kriteria=$row[Id_Mahasiswa]\">Li
hat</a></CENTER></TD>
    <TD width=10><CENTER><A
HREF=\"home.php?menu_home=edit_mahasiswa&Id_Kriteria=$row[Id_Mahasiswa]\"
><img src=\"../images/edit.ico\"></A></CENTER></TD>

```

```

<TD width=10><CENTER><A HREF=\"delete_mahasiswa.php?Id_Kriteria=$row[0]\" onclick=\"return confirm('Apakah anda yakin akan menghapus mahasiswa $row[Nama_Kriteria]')\"><img src=\"../images/delete.gif\"></A></CENTER></TD>
</TR>

9. View_kriteria.php
<script >
function hapus_text(elm){
    elm.value = "";
}
function kembalikan(elm){
    if(elm.value == ""){
        elm.value = "Masukkan nama kriteria";
    }
}
function cari_mahasiswa(){
    var cari_kriteria = document.getElementById("cari_kriteria").value;
    window.location.href="home.php?menu_home=view_kriteria&cari="+cari_kriteria ;
}
</script>
<div style="margin-left:6% ;padding:4px">
<A HREF="home.php?menu_home=tambah_kriteria">Tambah data</A>
<input type="text" id="cari_kriteria" value="Masukkan nama kriteria" onblur="kembalikan(this)" onfocus="hapus_text(this)"/><input type="button" value="cari" onclick="cari_mahasiswa()"/>
</div>
<CENTER><TABLE class = 'data'>
<tr bgcolor="#CC0000 >
    <td align="center"><B>NO</B></td>
    <td align="center"><B>Id Kriteria</B></td>
    <td align="center"><B>Nama Kriteria</B></td>
    <td align="center"><B>Jenis</B></td>
    <td align="center"><B>EDIT</B></td>
    <td align="center"><B>DELETE</B></td>

</tr>
<?php
if(isset($_GET['cari'])){
    $cari = "where nama like '%".$_GET['cari']."%'";
}
else {
    $cari = "";
}
$data=mysql_query("select * from kriteria $cari order by Id_Kriteria");
$i = 1;
while($row=mysql_fetch_array($data)){

```

```

echo"
<TR>
    <TD>$i</TD>
    <TD>$row[0]</TD>
    <TD>$row[1]</TD>
    <TD>$row[2]</TD>
    <TD width=10><CENTER><A href=\"$home.php?menu_home=edit_kriteria&Id_Kriteria=$row[0]\"><img src=\"../images/edit.ico\"/></A></CENTER></TD>
    <TD width=10><CENTER><A href=\"delete_kriteria.php?Id_Kriteria=$row[0]\" onclick=\"return confirm('Apakah anda yakin akan menghapus kriteria $row[nama] ')\"><img src=\"../images/delete.gif\"/></A></CENTER></TD>
</TR>
";
$i++;
}
?>
</TABLE></CENTER>
<BR>
<CENTER><?
$tampil=mysql_query("select * from kriteria $cari");
$jmldata=mysql_num_rows($tampil);
echo "<p>Total Kriteria mahasiswa: <b>$jmldata</b></p>";
?></CENTER>
</FORM>

```

10. **View\_batas\_himpunan\_fuzzy.php**

```

<CENTER><BR><TABLE border=1>
<tr bgcolor=#990000>
    <td rowspan="2" align="center">NO</td>
    <td rowspan="2" align="center">Id Kriteria</td>
    <td rowspan="2" align="center">Id Batas</td>
    <td rowspan="2" align="center" width='105'>Nama Batas </td>
    <td colspan="3" align="center">Batas himpunan</td>
    <td rowspan="2" align="center" width='100'>Nilai</td>
    <td rowspan="2" align="center" width='100'>Kurva</td>
    <td rowspan="2" align="center">Edit</td>
    <td rowspan="2" align="center">Delete</td>
</tr>
<TR>
    <td align="center" width='115'>Batas Bawah</td>
    <td align="center" width='115'>Batas Tengah</td>
    <td align="center" width='100'>Batas Atas</td>
</TR>

```

```

<?php
$x = 10;
$hal = $_GET['hal'] ? $_GET['hal'] : 0;

$sql = "SELECT * FROM batas_himpunan";
$res = mysql_query($sql) or die (mysql_error());

$jumlah = mysql_num_rows($res);

// limit
$sqllimit = "SELECT * FROM batas_himpunan order by Id_Kriteria,Nilai LIMIT
".$hal.", ".$x;
$reslimit = mysql_query($sqllimit) or die (mysql_error());
?>
<?

$i = 1;

while ($row = mysql_fetch_array($reslimit)) {
    if($i%2==0);
    echo"
<TR>
<TD><CENTER>$i</CENTER></TD>
<TD><CENTER>$row[Id_Kriteria]</CENTER></TD>
<TD><CENTER>$row[Id_Batas]</CENTER></TD>
<TD>&ampnbsp$row[Nama_Batas]</TD>
<TD width='105'><CENTER>$row[Batas_Bawah]</CENTER></TD>
<TD width='115'><CENTER>$row[Batas_Tengah]</CENTER></TD>
<TD width='100'><CENTER>$row[Batas_Atas]</CENTER></TD>
<TD width='100'><CENTER>$row[Nilai]</CENTER></TD>
<TD width='100'>&ampnbsp$row[Kurva]</TD>
<TD width=10><CENTER><A
HREF=\"$menu_home=edit_batas&idk=$row[Id_Kriteria]&idb=$row[Id_Batas]\"><img
src=\"../images/edit.ico\" class=aa></A></CENTER></TD>
<TD width=10><CENTER><A
HREF=\"$delete_batas.php?idk=$row[Id_Kriteria]&idb=$row[Id_Batas]\"
onclick=\"$return confirm('Apakah anda yakin akan menghapus batas
$row[Nama_Batas]')\"><img
src=\"../images/delete.gif\" class=aa></A></CENTER></TD>
</TR>
";
$i++;
}
?>
</TABLE>
<BR>
</center>Jumlah Record: <?=$jumlah;?><br />

```

```

Halaman :
<?
$max = ceil($jumlah / $x);
for ($i=1; $i<=$max; $i++) {
    $link[$i] = $i * $x - $x;
    echo "
".\$i."</
a> ";
}
?>

```

### **11. Home\_user.php**

```

<?
session_start();
IF($_SESSION['USER']){
$menu_home_user=$_GET['menu_home_user'];
?>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <title>Sistem Pendukung Keputusan| SELEKSI ASDOS PRAKTIKUM T.INFORMATIKA UMG</title>
    <meta name="keywords" content="" />
    <meta name="description" content="" />
    <meta http-equiv="content-type" content="text/html; charset=utf-8" />
    <meta http-equiv="content-language" content="" />
    <link href="style.css" rel="stylesheet" type="text/css" />
</head>

<body>
    <div id="page">
        <div id="header">
            <h1><a href="#">Sistem Pendukung Keputusan</a></h1>
            <p id="subtitle">SELEKSI ASDOS PRAKTIKUM T.INFORMATIKA UMG</p>
        </div>
        <div id="menu">

            <ul>
                <li><a href="home_user.php">Beranda</a></li>
                <li><a href="home_user.php?menu_home_user=alur_sistem">Alur Sistem</a></li>
                <li><a href="home_user.php?menu_home_user=perangkingan">Perangkingan</a></li>
                <li><a href="logout.php">Keluar</a></li>
            <ul>
        </div>
    </div>
</body>

```

```

        </ul>
    </div>
    <div id="main">
        <div id="sidebar">
            <div id="login">
                <h2>Main Menu</h2>
                <div class="box2">

                    <ul>
                        <li><a href="home_user.php?menu_home_user=view_daftar_mahasiswa_user">Master Mahasiswa</a></li>

                    </ul>
                </div>
            </div><!-- box -->

        </div><!-- sidebar -->
        <div id="content">
            <div id="contheader">
                <h2><?echo "Selamat Datang" ?></h2>
            </div>
            <div id="content2">
                <div class="post">
                    <h2><a href="#"></a></h2>
                    <p class="postmeta"><?

if($menu_home_user != "") {
    include $menu_home_user.".php";
} else{
    include('wellcome.php');
}
?></p>
                </div>
            </div><!-- post -->

        </div><!-- content2 -->

    </div><!-- content -->

    </div><!-- main -->
</div><!-- page -->
</body>
</html>
<?
}
?>

```

## 12. Perangkingan.php

```
<script >

function cetak() {
    window.open("cetak_hasil_perangkingan.php","","","width=700 height=400");
}

</script>

<right>

<input type="image" onclick="cetak()" img src="images/print.gif"/>

<TABLE border="1" width="100%" height="">

<?php

error_reporting(0);

include_once "connect.php";

if(isset($_POST['hitung'])) {

/*
----- Mengambil seluruh batas himpunan dan memberikan nilai balik berupa array
-----*/
function ambil_batas_himpunan() {

    $tabel = "batas_himpunan";
    $sql = "select * from ".$tabel." order by Id_Kriteria,Nilai";
    $sql_exe = mysql_query($sql);
    // Kriteria_id dimulai dari 1, cek tabel kriteria
    $index_kriteria = 0;
    $Id_Kriteria = Array();
    $sql_kriteria_exe = mysql_query("select Id_Kriteria from kriteria");
    while($id_kri = mysql_fetch_assoc($sql_kriteria_exe)) {
        array_push($Id_Kriteria,$id_kri['Id_Kriteria']);
    }
    // $Id_Kriteria = 1;
    $arr_batas = array();
    while($data = mysql_fetch_array($sql_exe)) {
        $arr_batas[$index_kriteria] = $data;
        $index_kriteria++;
    }
    return $arr_batas;
}
}
```

```

        if($data['Id_Kriteria'] == $Id_Kriteria[$index_kriteria]){

            $himpunan = $data['Id_Batas']; // SB,C,SK dst

            $arr_batas[$Id_Kriteria[$index_kriteria]][$himpunan] =
array($data['Batas_Bawah'],$data['Batas_Tengah'],$data['Batas_Atas'],$data['Nilai'],
],$data['Kurva']);

        }

        else {

            $index_kriteria++;

            $himpunan = $data['Id_Batas']; // SB,C,SK dst

            $arr_batas[$Id_Kriteria[$index_kriteria]][$himpunan] =
array($data['Batas_Bawah'],$data['Batas_Tengah'],$data['Batas_Atas'],$data['Nilai'],
],$data['Kurva']);

        }

    }

    return $arr_batas;
}

function fuzzy_linear_turun($x,$Batas_Tengah,$Batas_Atas){

    if($x <= $Batas_Tengah){

        return 1;

    }

    else if($x >= $Batas_Tengah && $x <= $Batas_Atas){

        return ($Batas_Atas - $x)/($Batas_Atas - $Batas_Tengah);

    }

    else return 0;

}

function fuzzy_linear_naik($x,$Batas_Bawah,$Batas_Tengah){

    if($x >= $Batas_Tengah){

        return 1;

    }

    else if($x >= $Batas_Bawah && $x <= $Batas_Tengah){

        return ($x - $Batas_Bawah)/($Batas_Tengah - $Batas_Bawah);

    }

    else return 0;

}

```

```

function fuzzy_segitiga($x,$Batas_Bawah,$Batas_Tengah,$Batas_Atas) {

    if($x <= $Batas_Bawah || $x >= $Batas_Atas) {
        return 0;
    }

    else if($x >= $Batas_Bawah && $x <= $Batas_Tengah) {
        return ($x - $Batas_Bawah)/($Batas_Tengah - $Batas_Bawah);
    }

    else {
        return ($Batas_Atas - $x)/($Batas_Atas - $Batas_Tengah);
    }
}

// $Nilai = Nilai sebenarnya, $Id_Kriteria = kriteria_id

function fuzzy_kriteria($Nilai,$Id_Kriteria,$batas_himpunan) {

    // $data[0] = Batas_Bawah, $data[1] = $Batas_Tengah, $data[2] =
    $Batas_Atas, $data[3] = Nilai_Fuzzy

    $temp_arr = array();
    $Nilai = floatval($Nilai);

    foreach($batas_himpunan[$Id_Kriteria] as $key => $data) {
        if($data[4] == "linear_turun") {
            $temp_arr[$key] =
            fuzzy_linear_turun($Nilai,$data[1],$data[2]);
        }
        else if($data[4] == "linear_naik") {
            $temp_arr[$key] =
            fuzzy_linear_naik($Nilai,$data[0],$data[1]);
        }
        else {
            $temp_arr[$key] =
            fuzzy_segitiga($Nilai,$data[0],$data[1],$data[2]);
        }
    }
}

// cari nilai yang terbesar $temp_arr ==> ini yang akan dipilih
$fuzzy_akar = max($temp_arr);

```

```

        // cari index dari nilai akar tersebut untuk mengambil nilai fuzzy dari
        batas himpunan

        $index_terpilih = array_search($fuzzy_akar,$temp_arr);

        return $batas_himpunan[$Id_Kriteria][$index_terpilih][3];

    }

/*
-----
* ini baru masuk prosesnya, tampilkan data asli dari nilai mahasiswa
-----
*/
$batas_himpunan = ambil_batas_himpunan(); // untuk perhitungan fuzzy

$sql_seleksi = "select Id_Mahasiswa,Nama_Mahasiswa from master_mahasiswa order by
Id_Mahasiswa";

$exe_seleksi = mysql_query($sql_seleksi);

$mhs_seleksi = Array();

while($mhs_temp = mysql_fetch_assoc($exe_seleksi)) {

    // buat array untuk menyimpan nilai per siswa

    $mhs_seleksi[$mhs_temp['Id_Mahasiswa']] = Array();

    $nama_mhs[$mhs_temp['Id_Mahasiswa']] = $mhs_temp['Nama_Mahasiswa'];// untuk
    nama aja

}

// simpan kedalam array aja biar lebih mudah nanti ketika menghitung

$sql_nilai = "select Id_Mahasiswa,Id_Kriteria,Nilai from nilai_mhs";

$exe_nilai = mysql_query($sql_nilai);

while($data = mysql_fetch_assoc($exe_nilai)){

    $mhs_seleksi[$data['Id_Mahasiswa']][$data['Id_Kriteria']] =
    $data['Nilai'];

}

// untuk generate header nama kriteria

$sql_kriteria_exe = mysql_query("select * from kriteria order by Id_Kriteria");

while($data = mysql_fetch_assoc($sql_kriteria_exe)){

    $kriteria[$data['Id_Kriteria']] = $data['Nama_Kriteria'];

}

// generate bobot kecocokan berdasarkan inputan user

```

```

echo "bobot dari inputan user : <br />";

$bobot = Array();

foreach($kriteria as $id_kri => $nama) {

    $bobot[$id_kri] = $_POST[$id_kri];

    echo $nama." bernilai : ".$_POST[$id_kri]." &ampnbsp&ampnbsp";}

echo "<table class='data'>";

echo "<caption>Nilai asli belum difuzzy</caption>";

echo "<tr>";

echo "<th>No</th><th>Nama</th><th>Id</th>";

foreach($kriteria as $nama_kriteria){

    echo "<th>".$nama_kriteria."</th>";

}

echo "</tr>";

$no = 1;

foreach($mhs_seleksi as $id_mhs => $nilai_mhs){

    echo "<tr>";

    echo "<td>".$no++."</td>";

    echo "<td>".$nama_mhs[$id_mhs]."</td>";

    echo "<td>".$id_mhs."</td>";

    foreach($nilai_mhs as $nilai){

        echo "<td>".$nilai."</td>";

    }

    echo "</tr>";

}

echo "</table>";

echo "<table class='data'>";

echo "<caption>Nilai setelah proses fuzzy</caption>";

echo "<tr>";

echo "<th>No</th><th>Nama</th><th>Id</th>";

foreach($kriteria as $nama_kriteria){

    echo "<th>".$nama_kriteria."</th>";

}

```

```

echo "</tr>";

$no = 1;

foreach($mhs_seleksi as $id_mhs => $nilai_mhs){

    echo "<tr>";

    echo "<td>".$no++."</td>";

    echo "<td>".$nama_mhs[$id_mhs]."</td>";

    echo "<td>".$id_mhs."</td>";

    foreach($nilai_mhs as $id_kri => $nilai){

        $nilai_crisp[$id_mhs][$id_kri] = $n_crisp =
fuzzy_kriteria($nilai,$id_kri,$batas_himpunan);

        echo "<td>".$n_crisp."</td>";

        // cari kuadrat tiap kriteria untuk perhitungan topsis

        $kuadrat[$id_kri] += pow($n_crisp,2);

    }

    echo "</tr>";

}

echo "<tr>";

echo "<td colspan='3'></td>";

foreach($kuadrat as $id_kri => $nilai_kuadrat){

    $kuadrat_pembagi[$id_kri] = sqrt($nilai_kuadrat);

    echo "<td>".$kuadrat_pembagi[$id_kri]."</td>";

}

echo "</tr>";

echo "</table>";

echo "<table class='data'>";

echo "<caption>Nilai setelah dinormalisasi</caption>";

echo "<tr>";

echo "<th>No</th><th>Nama</th><th>Id</th>";

foreach($kriteria as $nama_kriteria){

    echo "<th>".$nama_kriteria."</th>";

}

echo "</tr>";

echo "</tr>";

```

```

$no = 1;

foreach($nilai_crisp as $id_mhs => $nilai_mhs){

    echo "<tr>";

    echo "<td>".$no++."</td>";

    echo "<td>".$nama_mhs[$id_mhs]."</td>";

    echo "<td>".$id_mhs."</td>";

    foreach($nilai_mhs as $id_kri => $nilai){

        $nilai_normalisasi[$id_mhs][$id_kri] =
$nilai/$kuadrat_pembagi[$id_kri];

        echo "<td>".$nilai_normalisasi[$id_mhs][$id_kri]."</td>";

        // cari kuadrat tiap kriteria untuk perhitungan topsis

        // $kuadrat[$id_kri] += pow($nilai_crisp,2);

    }

    echo "</tr>";

}

echo "</table>";

echo "<table class='data'>";

echo "<caption>Nilai setelah R * W</caption>";

echo "<tr>";

echo "<th>No</th><th>Nama</th><th>Id</th>";

foreach($kriteria as $nama_kriteria){

    echo "<th>".$nama_kriteria."</th>";

}

echo "</tr>";

$no = 1;

foreach($nilai_normalisasi as $id_mhs => $nilai_mhs){

    echo "<tr>";

    echo "<td>".$no++."</td>";

    echo "<td>".$nama_mhs[$id_mhs]."</td>";

    echo "<td>".$id_mhs."</td>";

    foreach($nilai_mhs as $id_kri => $nilai){


```

```

// $max_min[$id_kri][] untuk mencari nilai max dan minimalnya

$nilai_ideal[$id_mhs][$id_kri] = $max_min[$id_kri][] = $nilai *
$bobot[$id_kri];

echo "<td>".$nilai_ideal[$id_mhs][$id_kri]."</td>";

// cari kuadrat tiap kriteria untuk perhitungan topsis

//      $kuadrat[$id_kri] += pow($nilai_crisp,2);

}

echo "</tr>";
}

echo "<tr>";

echo "<td colspan='3'>Nilai Maximal</td>";

foreach($bobot as $id_kri => $nilai){

    $max[$id_kri] = max($max_min[$id_kri]);

    echo "<td>".$max[$id_kri]."</td>";

}

echo "</tr>";
echo "<tr>";

echo "<td colspan='3'>Nilai Minimal</td>";

foreach($bobot as $id_kri => $nilai){

    $min[$id_kri] = min($max_min[$id_kri]);

    echo "<td>".$min[$id_kri]."</td>";

}

echo "</tr>";

echo "</table>";

echo "<table class='data'>";

echo "<caption>Nilai Ideal Positif Dan Negatif</caption>";

echo "<tr>";

echo "<th>No</th><th>Nama</th><th>Id</th><th>Nilai Positif</th><th>Nilai Negatif</th><th>Hasil Akhir</th>";

echo "</tr>";

$no = 1;

foreach($nilai_ideal as $id_mhs => $nilai_mhs){

    echo "<tr>";



```

```

echo "<td>".$no++."</td>";
echo "<td>".$nama_mhs[$id_mhs]."</td>";
echo "<td>".$id_mhs."</td>";
$total_permhs_pos = 0;
$total_permhs_neg = 0;
foreach($nilai_mhs as $id_kri => $nilai) {
    // $max_min[$id_kri][] untuk mencari nilai max dan minimalnya
    $total_permhs_pos += pow(($nilai - $max[$id_kri]),2);
    $total_permhs_neg += pow(($nilai - $min[$id_kri]),2);
    $ideal_positif[$id_mhs]=sqrt($total_permhs_pos);
    $ideal_negatif[$id_mhs]=sqrt($total_permhs_neg);
    $hasil_akhir[$id_mhs] =
    $ideal_negatif[$id_mhs]/($ideal_positif[$id_mhs]+$ideal_negatif[$id_mhs]);
    // echo "<td>".$nilai_ideal[$id_mhs][$id_kri]."</td>";
    // cari kuadrat tiap kriteria untuk perhitungan topsis
    // $kuadrat[$id_kri] += pow($nilai_crisp,2);
}
echo "<td>".$ideal_positif[$id_mhs]."</td>";
echo "<td>".$ideal_negatif[$id_mhs]."</td>";
echo "<td>".$hasil_akhir[$id_mhs]."</td>";

echo "</tr>";
}

echo "</table>";

// urutkan hasil akhirnya
arsort($hasil_akhir);
echo "<table class='data'>";
echo "<caption>Hasil perangkingan nilai >= 0,5 adalah mhs yg terpilih </caption>";
echo "<tr>";
echo "<th>No</th><th>Nama</th><th>Id</th><th>Hasil Akhir</th>";
```



```

<td align="center"><FONT SIZE="3" COLOR="#FFFFFF"><B>Nama
Kriteria</B></FONT></td>

<td align="center"><font size="3" color="#FFFFFF"><B>Tingkat
Kepentingan</B></td>

</tr>

<?php

    $sql = "select * from kriteria order by Id_Kriteria";

    $sqlExe=mysql_query($sql);

    $jml_kriteria = mysql_num_rows($sqlExe);

    $i = 1;

    $Bobot =
array("SB"=>"5", "B"=>"4", "C"=>"3", "K"=>"2", "SK"=>"1");

    while($row=mysql_fetch_array($sqlExe)) {

        echo "<tr><TD><center>$i</center></TD>";
        echo "<td>".$row['Nama_Kriteria']."</td>";
        echo "<td>";

        foreach($Bobot as $key => $Nilainya) {

            echo "<input type='radio'
value='".$Nilainya."' name='".$row['Id_Kriteria']."' checked/>".$key;
            }

        echo "</td>";
        echo "</tr>";

        $i++;
    }

    ?      <tr>

        <td colspan="3"><input type="submit" value="OK" name="hitung"/></td>

    </tr>

</TABLE>

</form>

<?php

}

```

## LAMPIRAN 2

### MAHASISWA YANG MENGIKUTI SELEKSI ASISTEN DOSEN PRAKTIKUM

NO	NAMA MAHASISWA	KELAS	NILAI PRAKTIKUM	NILAI MTAKULIAH	TES KODING	PRESENTASI	INTERVIEW	NILAI AKHIR
1	Dedi Purnomo	a_sore	C	BC	67	71	63	
2	Sony Achmadi	a_pagi	AB	AB	86	87	65	
3	David	b_sore	AB	AB	87	91	68	
4	Nur Lailiyah	b_pagi	AB	A	37	49	55	
5	Zula	b_pagi	B	B	59	70	70	
6	Hamdan Sobri	a_pagi	A	A	41	42	54	
7	Meika	b_sore	BC	C	51	56	70	
8	Putri	a_sore	BC	BC	98	96	68	
9	Tegar	a_sore	A	A	91	93	69	
10	Khoirul	a_pagi	AB	A	50	57	70	

$$A = 90 - 100, \ AB = 80 - 90, \ B = 70 - 80, \ BC = 60 - 70, \ C = <= 60$$

Terdapat 10 mahasiswa yang mengikuti seleksi asisten dosen praktikum.

Dari data tersebut terpilih.....mahasiswa yang bisa menjadi asisten dosen praktikum dengan nilai  $\geq 70$ . Mahasiswa tersebut bernama :

1. ...., nilai akhir .....
2. ...., nilai akhir .....
3. ...., nilai akhir .....
4. ...., nilai akhir .....
5. ...., nilai akhir .....

PENGISI ANGKET

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### MAHASISWA YANG MENGIKUTI SELEKSI ASISTEN DOSEN PRAKTIKUM

NO	NAMA MAHASISWA	KELAS	NILAI PRAKTIKUM	NILAI MTAKULIAH	TES KODING	PRESENTASI	INTERVIEW	NILAI AKHIR
1	Dedi Purnomo	a_sore	C	C	67	71	63	
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3	David	b_sore	AB	AB	87	91	68	
4	Nur Lailiyah	b_pagi	AB	A	37	49	55	
5	Zula	b_pagi	B	B	59	70	70	
6	Hamdan Sobri	a_pagi	AB	B	41	42	54	
7	Meika	b_sore	BC	C	51	56	70	
8	Putri	a_sore	BC	BC	98	96	68	
9	Tegar	a_sore	A	A	91	93	69	
10	Khoirul	a_pagi	AB	A	50	57	70	

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1. ...., nilai akhir .....
2. ...., nilai akhir .....
3. ...., nilai akhir .....
4. ...., nilai akhir .....
5. ...., nilai akhir .....

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