

LAMPIRAN

Source Code Halaman Login

```
<?php

namespace Illuminate\Auth\Events;

use Illuminate\Queue\SerializesModels;

class Login
{
    use SerializesModels;

    /**
     * The authentication guard name.
     *
     * @var string
     */
    public $guard;

    /**
     * The authenticated user.
     *
     * @var \Illuminate\Contracts\Auth\Authenticated
     */
    public $user;

    /**
     * Indicates if the user should be "remembered".
     */
}
```

```

    * @var bool
    */
    public $remember;

    /**
     * Create a new event instance.
     *
     * @param string $guard
     * @param \Illuminate\Contracts\Auth\Authenticatable $user
     * @param bool $remember
     * @return void
     */
    public function __construct($guard, $user, $remember)
    {
        $this->user = $user;
        $this->guard = $guard;
        $this->remember = $remember;
    }
}

```

Source Code Halaman Data Siswa

```

<div class=" m-5 p-5 bg-white rounded-md">
    <div class=" flex justify-between items-center my-3">
        <div class=" text-xl font-semibold">Siswa Form</div>
    </div>
    <div>
        <form action="" method="POST" class=" flex flex-col gap-3">
            @csrf
            <div class=" flex flex-col">

```

```

</div> Code :</div>
<input class=" w-full bg-slate-100 p-3 rounded-md" type="text"
name="code" id=""
value="{{ isset($siswa) ? $siswa->code : " }}">
</div>
<div class=" flex flex-col">
<div> Nama :</div>
<input class=" w-full bg-slate-100 p-3 rounded-md" type="text"
name="nama" id=""
value="{{ isset($siswa) ? $siswa->nama : " }}">
</div>
<div class=" flex flex-col">
<div> Kelas :</div>
<input class=" w-full bg-slate-100 p-3 rounded-md" type="text"
name="kelas" id=""
value="{{ isset($siswa) ? $siswa->kelas : " }}">
</div>
<div>
<button class="p-3 bg-blue-500 text-white rounded-
md">Simpan</button>
</div>
</form>
</div>

```

Source Code Halaman Data Nilai Siswa

```

<div class=" m-5 p-5 bg-white rounded-md">
<div class=" flex justify-between items-center my-3">
<div class=" text-xl font-semibold">Nilai Siswa Form</div>

```

```

</div>
<div>
  <form action="" method="POST" class=" flex flex-col gap-3">
    @csrf
    <div class=" flex flex-col">
      <div> Code :</div>
      {{-- <input class=" w-full bg-slate-100 p-3 rounded-md"
type="text" name="code_siswa" id=""
      value="{{ isset($nilai) ? $nilai->code_siswa : " }}"> --}}
      <select name="code_siswa" class=" w-full bg-slate-100 p-3
rounded-md">
        @foreach ($all_siswa as $siswa)
          <option value="{{ $siswa->code }}"
            {{ isset($nilai) ? ($nilai->code_siswa === $siswa->code
? 'selected' : '') : " }}">
            {{ $siswa->code }}</option>
        @endforeach
      </select>
    </div>
    <div class=" flex flex-col">
      <div> Biologi :</div>
      <input class=" w-full bg-slate-100 p-3 rounded-md"
type="number" name="bio" id=""
      value="{{ isset($nilai) ? $nilai->bio : " }}">
    </div>
    <div class=" flex flex-col">
      <div> Fisika :</div>
      <input class=" w-full bg-slate-100 p-3 rounded-md"
type="number" name="fis" id=""

```

```
        value="{{ isset($nilai) ? $nilai->fis : " }}">
    </div>
    <div class=" flex flex-col">
        <div> Kimia :</div>
        <input class=" w-full bg-slate-100 p-3 rounded-md"
type="number" name="kim" id=""
        value="{{ isset($nilai) ? $nilai->kim : " }}">
    </div>
    <div class=" flex flex-col">
        <div> Matematika :</div>
        <input class=" w-full bg-slate-100 p-3 rounded-md"
type="number" name="mat" id=""
        value="{{ isset($nilai) ? $nilai->mat : " }}">
    </div>
    <div class=" flex flex-col">
        <div> Ekonomi :</div>
        <input class=" w-full bg-slate-100 p-3 rounded-md"
type="number" name="eko" id=""
        value="{{ isset($nilai) ? $nilai->eko : " }}">
    </div>
    <div class=" flex flex-col">
        <div> Geografi :</div>
        <input class=" w-full bg-slate-100 p-3 rounded-md"
type="number" name="geo" id=""
        value="{{ isset($nilai) ? $nilai->geo : " }}">
    </div>
    <div class=" flex flex-col">
        <div> Sejarah :</div>
```

```

        <input class=" w-full bg-slate-100 p-3 rounded-md"
type="number" name="sej" id=""
        value="{{ isset($nilai) ? $nilai->sej : " }}">
    </div>
    <div class=" flex flex-col">
        <div> Sosial :</div>
        <input class=" w-full bg-slate-100 p-3 rounded-md"
type="number" name="sos" id=""
        value="{{ isset($nilai) ? $nilai->sos : " }}">
    </div>
    <div>
        <button class="p-3 bg-blue-500 text-white rounded-
md">Simpan</button>
    </div>
</form>
</div>
</div>

```

Source Code Halaman Klastering

```

Class KlasteringContorller extends Controller
{
    function normalisai_nilai($nilai)
    {
        return [
            "bio" => $nilai->bio / 10,
            "fis" => $nilai->fis / 10,
            "kim" => $nilai->kim / 10,

```

```

"mat" => $nilai->mat / 10,
"eko" => $nilai->eko / 10,
"geo" => $nilai->geo / 10,
"sej" => $nilai->sej / 10,
"sos" => $nilai->sos / 10,
];
}
function kartesius($a, $b)
{
    $k = [
        "bio",
        "fis",
        "kim",
        "mat",
        "eko",
        "geo",
        "sej",
        "sos",
    ];

    $out = 0;
    foreach ($k as $kk) {
        $out += pow($a[$kk] - $b[$kk], 2);
    }

    return sqrt($out);
}
function cari_jarak($a, $centroids)

```



```
{
    $out = [];

    foreach ($centroids as $cnt) {
        $out[] = $this->kartesian($a, $cnt);
    }

    return $out;
}

function knn($n, $centroid)
{
    $cen1_awal = $this->normalisasi_nilai(Nilai::where('code_siswa', '=',
$centroid->centroid_1)->first());
    $cen2_awal = $this->normalisasi_nilai(Nilai::where('code_siswa', '=',
$centroid->centroid_2)->first());

    $all_nilai = Nilai::all();
    $nilai_normal = [];

    foreach ($all_nilai as $nl) {
        $nilai_normal[$nl->code_siswa] = $this->normalisasi_nilai($nl);
    }

    //perhitungan
    $all_centroid_end = [];
    $all_jarak_end = [];

    //cari jarak

    for ($i = 0; $i < $n; $i++) {
```



```
$all_centroid_end[$i] = [$scen1_awal, $scen2_awal];
```

```
$jrk = [];
```

```
foreach ($nilai_normal as $code => $nil) {  
    $jrk[$code] = $this->cari_jarak($nil, [$scen1_awal, $scen2_awal]);  
}
```

```
$all_jarak_end[$i] = $jrk;
```

```
$most_closest = [];
```

```
foreach ($jrk as $code => $jr) {  
    $most_closest[$code] = array_keys($jr, min($jr))[0];  
}
```

```
//cari centroid baru
```

```
$_cen_1 = [];
```

```
$_cen_2 = [];
```

```
$_cen_1_n = 0;
```

```
$_cen_2_n = 0;
```

```
foreach ($most_closest as $code => $ms_cls) {  
    if ($ms_cls === 0) {  
        if (count($_cen_1) < 1) {  
            $_cen_1 = $nilai_normal[$code];  
        } else {  
            foreach ($nilai_normal[$code] as $kd => $nl) {  
                $_cen_1[$kd] += $nl;  
            }  
        }  
    }  
}
```

```

        $_cen_1_n += 1;
    } else {
        if (count($_cen_2) < 1) {
            $_cen_2 = $nilai_normal[$code];
        } else {
            foreach ($nilai_normal[$code] as $kd => $nl) {
                $_cen_2[$kd] += $nl;
            }
        }
        $_cen_2_n += 1;
    }
}

foreach ($_cen_1 as $kd => $nl) {
    $_cen_1[$kd] = $_cen_1[$kd] / $_cen_1_n;
    $_cen_2[$kd] = $_cen_2[$kd] / $_cen_2_n;
}

$scen1_awal = $_cen_1;
$scen2_awal = $_cen_2;
}

$all_centroid_end[$n] = [$scen1_awal, $scen2_awal];

return ['all_centroid_end' => $all_centroid_end, 'all_jarak_end' =>
$all_jarak_end, 'nilai_normal' => $nilai_normal];
}

public function index(Request $request)
{

```

```
$all_siswa = Siswa::orderByRaw('CONVERT(code, SIGNED) desc')->get();
$centroid = Centroid::first();

if ($request->centroid_1 && $request->centroid_2) {
    $centroid->centroid_1 = $request->centroid_1;
    $centroid->centroid_2 = $request->centroid_2;
    $centroid->save();
}

$n = 4;

$out = $this->knn($n, $centroid);

$all_centroid_end = $out['all_centroid_end'];
$all_jarak_end = $out['all_jarak_end'];

// dd($_cen_1);

return view('admin.kelastering', compact('all_siswa', 'centroid',
'all_centroid_end', 'all_jarak_end', 'n'));
}
```

```

public function hasil()
{

    $centroid = Centroid::first();
    $out = $this->knn(5, $centroid);

    $all_jarak_end = $out['all_jarak_end'][4];
    $nilai_normal = $out['nilai_normal'];

    return view('admin.hasil', compact('all_jarak_end', 'nilai_normal'));
}
}

```

Source Code Halaman Hasil Klastering

```

<div class=" flex flex-col gap-5 p-5">
  <div class="p-5 bg-white rounded-md flex flex-col gap-3">
    <div class="flex justify-between items-center">
      <div class=" font-semibold">Hasil kelastering</div>
      <button onclick="printDiv('printableArea')" class=" bg-blue-500 text-
white p-3 rounded-md">Cetak</button>
    </div>
    <div id="printableArea">
      <table class="w-full">
        <thead>
          <tr>
            <td class="p-3 border">Kode</td>
            <td class="p-3 border">Biologi</td>

```

```

        <td class="p-3 border">Fisika</td>
        <td class="p-3 border">Kimia</td>
        <td class="p-3 border">Matematika</td>
        <td class="p-3 border">Ekonomi</td>
        <td class="p-3 border">Geografi</td>
        <td class="p-3 border">Sejarah</td>
        <td class="p-3 border">Sosial</td>
        <td class="p-3 border">Centroid</td>
    </tr>
</thead>
<tbody>
    @foreach ($nilai_normal as $key => $nilai)
        <tr>
            <td class="p-3 border">{{ $key }}</td>
            <td class="p-3 border">{{ $nilai['bio'] }}</td>
            <td class="p-3 border">{{ $nilai['fis'] }}</td>
            <td class="p-3 border">{{ $nilai['kim'] }}</td>
            <td class="p-3 border">{{ $nilai['mat'] }}</td>
            <td class="p-3 border">{{ $nilai['eko'] }}</td>
            <td class="p-3 border">{{ $nilai['geo'] }}</td>
            <td class="p-3 border">{{ $nilai['sej'] }}</td>
            <td class="p-3 border">{{ $nilai['sos'] }}</td>
            <td class="p-3 border">
                {{
                    array_keys($all_jarak_end[$key],
min($all_jarak_end[$key]))[0] ? 'SOSHUM' : 'SAINTEK' }}
            </td>
        </tr>
    @endforeach
</tbody>

```

```
</table>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<script>
```

```
function printDiv(divName) {
```

```
    var printContents = document.getElementById(divName).innerHTML;
```

```
    var originalContents = document.body.innerHTML;
```

```
    document.body.innerHTML = printContents;
```

```
    window.print();
```

```
    document.body.innerHTML = originalContents;
```

```
}
```

```
</script>
```


No	Nama Lengkap	Kelas	Biologi	Fisika	Kimia	Matematika	Ekonomi	Geografi	Sejarah	Sosiologi
1	ABBELIA SHOFI MAGHFIROH	X A	96	92	71,2	76	80	77	92	84
2	AFIFA LAILATUL BADRIYAH	X A	76	96	65,7333	76	72	79	88	72
3	AGHNIA NAFISHA JANNAH	X A	88	92	78,1333	68	84	52,6667	76	84
4	ALFIN SIAHAAN	X A	60	70	11,0667	44	32	29	80	40
5	ALIF VAENEWZA RINJANI MOUNT	X A	72	88	48,8	20	88	66,3333	84	64
6	AMINAH NUR HIDAYAH	X A	92	88	34,2667	36	68	81	56	72
7	ANDHYSTA YUSLARDIKA ANANT	X A	32	92	35,7333	40	56	62,3333	84	52
8	ANGGY PRIYANSA	X A	80	88	69,7333	68	56	55,3333	92	72
9	ANITA SUGIARTI	X A	92	68	61,7333	84	72	63,3333	96	84
10	ATALARA MEISIA CITA WISUDA	X A	96	96	78,9333	80	72	56,3333	96	88
11	AULIA ANGGUN PRATIWI	X A	96	96	74,1333	84	88	69,6667	92	88
12	BIAS ANISA SURGAWI	X A	72	80	33,8667	40	88	41	80	72
13	CHELSEA LAILIA PUTRI NOVIANT	X A	96	96	72,1333	80	88	68	92	84
14	EGIES DWITA PRIHANDINI	X A	68	92	62,5333	68	72	83	84	76
15	FARIDHOTUL A'MAL HENDRA NA	X A	72	96	70,4	72	56	89	76	80
16	FELYSIA AZHARA	X A	96	80	62,4	40	32	40	92	72
17	FHELISA DEWI ANJANI	X A	84	96	67,7333	84	68	95	84	84
18	GADIZA SALSABILLA HIDAYAT	X A	92	92	37,0667	72	72	70,3333	84	84
19	HAFIHZ WAHYU RAYIDIANSYAH	X A	68	92	63,6	44	72	81	76	64
20	MASNA SALWA SALSABILA	X A	68	84	20,8	28	64	33	48	60
21	MOHAMMAD RIZKY KAFABI	X A	68	96	55,6	52	72	85	88	64
22	MUHAMMAD ARFIDHIKA PRATA	X A	80	92	62	44	88	73	80	72
23	MUHAMMAD FARHAN NAUFAL	X A	56	56	70,9333	12	64	77	80	28
24	MUHAMMAD GERALDIN	X A	68	92	61,0667	80	64	73	84	72
25	MUHAMMAD NURKHOLIS MAJID	X A	20	96	79,2	68	64	65	60	68
26	NUR KHAIBIB	X A	92	96	60,1333	68	88	88	70	64
27	ROYAN TRI ARDIANSYAH	X A	70	70	70	52	65	60	75	55
28	SATRIA MAHARDIKA	X A	72	96	66,5333	64	60	81	80	80
29	TAZKIA AQILA AZZAHRA	X A	88	96	72,5333	76	84	75	84	68
30	THALITA INTAN NUGRAHENI	X A	88	96	53,6	76	68	95	84	80
31	ADINDA WULANDARI	X B	96	96	67,7333	80	76	90,6667	100	80
32	ALIYA PASHA	X B	56	80	26,2667	52	68	66,3333	88	60
33	ANDRE LORENZO	X B	88	80	52,4	24	84	74,3333	88	64
34	AULIA NAZWA NURLAINI	X B	100	88	60,1333	32	64	69,3333	96	72
35	AYLA AZZURA SUSILOWATI	X B	92	76	66,5333	60	64	73	80	76
36	AYU WULANDARI	X B	92	100	65,7333	88	88	74,3333	84	68
37	DIAN NIKMATUROHMAH	X B	96	84	51,7333	68	64	82,3333	68	68
38	EKA AUREL PUSPITASARI	X B	80	84	69,0667	52	60	50,3333	40	52
39	ERWINDO NUR AGDIANTO	X B	88	92	61,7333	52	84	89,3333	88	64
40	FABIAN RIZIQ ATHAULLAH AL HA	X B	88	92	49,0667	40	72	76	84	68
41	FIRLITA AUDIYA MECCA	X B	84	68	20,2667	52	76	73,3333	84	76
42	FRISCO BILLY FURQON	X B	84	60	65,0667	24	70	60	65	40
43	ILHAM MANAF SANJAYA	X B	88	56	30,4	16	44	52	60	52
44	ILMIA TUZZAHRO	X B	88	92	65,0667	84	80	70,3333	84	68
45	INGGA AYU FIBRIANTO	X B	92	60	54,9333	60	64	58,3333	68	56
46	JEVAN JULIANO SAVERRO SANTO	X B	70	76	60	16	68	55	40	60
47	KEVIN ADAM FIRMANSYAH	X B	92	88	56,9333	40	80	74,3333	76	68
48	KIRANA YULI ASMARA	X B	100	88	62,4	80	80	90,3333	92	72
49	MEYLANI EMBUN NINGTYAS	X B	92	76	50,5333	64	80	75,6667	80	64
50	MOCHAMAD HAICAL ANSORI	X B	92	80	61,0667	36	56	70,3333	84	80

No	Nama Lengkap	Kelas	Biologi	Fisika	Kimia	Matematika	Ekonomi	Geografi	Sejarah	Sosiologi
51	MOHAMMAD FAJAR SYARIFUDDI	X B	64	64	70	72	64	65	68	44
52	MOHAMMAD IQBAL RIZKI PUTRA	X B	72	80	42,9333	28	68	70,3333	84	56
53	MUHAMMAD FARIS AL HUSNI	X B	68	84	66,9333	20	92	74,3333	88	64
54	NABILA SHAF A SALSABILAH	X B	92	76	22,9333	60	88	80	92	72
55	NIKITA BARINDA RAHMAT	X B	92	92	83,7333	84	84	96	92	80
56	RAHMA AMELLYA ROSSA	X B	96	96	70,9333	84	96	96	92	68
57	SITI ZULAYKA ASSYIFA ILA SURY	X B	100	88	51,7333	40	80	88	72	76
58	TANIA MARLIN UMBOH	X B	84	88	49,2	64	84	81	80	60
59	TIWI SURYA NINGRUM	X B	84	88	65,0667	32	64	66,3333	84	76
60	ZACHARY YAHYA	X B	88	92	57,7333	28	72	81,3333	84	76
61	HILWA FATHIYYA AN-NAFIISAH	X B	100	88	55,3333	60	72	80	96	84
62	KEYSYA THIRTHANIA RAMADHA	X B	84	64	38,9333	60	56	61,3333	76	64
63	AMELINDA SABRINA NATSYA	X-C	60	68	61,0667	56	84	62,3333	80	84
64	AULIA TAZWA NURLAINI	X-C	80	88	62,1333	76	72	78	96	76
65	BAYU SETIAWAN	X-C	80	68	70,8	68	80	57,3333	68	84
66	CINDY YUSTINA SAMIUS	X-C	84	80	71,2	76	88	58,3333	80	64
67	DWI SAL'DATUL CHOLILAH	X-C	92	56	79,7333	60	68	92	84	84
68	FAJAR IZZUL MUSLIMIN	X-C	60	88	69,0667	84	84	65	84	76
69	FATIMAH AZ ZAHRA	X-C	76	80	75,7333	76	80	66,3333	84	88
70	GIO CANDRA WINATA	X-C	20	60	29,3333	20	16	24	60	12
71	IFFAH PRASDEVTA	X-C	88	80	68,8	88	68	100	72	88
72	ILHAM MIFTAHUL ARIFIN SUGIAN	X-C	76	72	61,3333	84	84	57,3333	60	76
73	KEHNYA CAHYA FELICIA IRAWA	X-C	88	92	70,1333	80	72	77	76	80
74	KHANZA AULIA NUR	X-C	80	88	69,3333	72	76	72,6667	84	76
75	MAYDINA NAZLIA	X-C	80	92	72,8	80	72	81	80	76
76	MOCHAMMAD GUNTUR SATRIA H	X-C	80	96	61,6	64	80	70,3333	84	76
77	MUFLIH AZHAR	X-C	80	100	71,7333	92	84	77,3333	80	84
78	MUHAMMAD DARUS SYIFA'	X-C	76	60	67,7333	56	76	70,3333	68	64
79	MUHAMMAD KHOIRIANSYAH	X-C	60	80	61,0667	44	60	73,3333	68	70
80	MUHAMMAD SEPTIYAN YUNIARTI	X-C	68	72	52,1333	68	72	77,3333	80	80
81	MUHAMMAD YUSUF SIDDIQI	X-C	80	80	54,2667	28	72	74,3333	84	68
82	NABILA AZHAROH RAHMAWATI	X-C	84	80	64,5333	88	84	78,3333	88	80
83	NASYWA RAFID ATTAILLAH	X-C	76	56	38,9333	36	72	70,3333	44	60
84	NAURAH FAIRUS SALAMAH	X-C	84	84	78,4	92	88	96	84	80
85	NITA NUR SAIDAH	X-C	72	76	69,6	88	68	66,3333	88	84
86	RIF'ATUL KHOIRIYAH	X-C	84	92	78,4	84	72	70,3333	76	76
87	RISMA NUR CAHYANI	X-C	80	84	63,7333	80	68	70,3333	84	88
88	SHABIRA FARSYA KHAIRANI	X-C	76	80	55	96	60	70	65	80
89	SUKMA AYU NABILATUL HIDAYA	X-C	88	80	74,4	84	80	96	80	84
90	SYAHBI IKHLASUL KHOIR	X-C	88	84	66,9333	76	88	73	80	84
91	TYARA GADIZ NOVISKA	X-C	80	100	78,9333	88	92	92	84	92
92	UBAIDILLAH HASAN	X-C	72	72	63,2	64	84	69,3333	76	84
93	YOGI WAHYU ADIYATMA	X-C	72	76	63,3333	80	68	77,3333	72	76
94	DEAN ANANTA	X-C	60	56	36,1333	36	32	65	12	32
95	ACHMAD FATHONI AL BUCHORI	X-D	92	92	91,7333	72	88	73,3333	68	76
96	ADEK FAJAR INDRA LESMANA	X-D	84	84	91,7333	60	84	88	76	84
97	ANDARI DWI SUCI LESTARI	X-D	65	76	90,4	56	76	88	84	92
98	ANGGITA TYAS NIRMALASARI	X-D	84	68	43,4667	32	72	69,3333	84	72
99	ANWAR DWI YULIONO	X-D	88	44	94,6667	100	68	88	65	76
100	ARIL RISKI SUSENO	X-D	88	16	94,4	60	92	88	80	80

No	Nama Lengkap	Kelas	Biologi	Fisika	Kimia	Matematika	Ekonomi	Geografi	Sejarah	Sosiologi
101	ARJU GHILMAN NAJAH	X-D	60	60	77,6	76	84	65	76	84
102	BAHRUL ALAMSYAH ALHIDAYAT	X-D	76	36	64,8	36	72	77	84	84
103	CITRA HABIBAH FERNANDI	X-D	36	70	27,7333	20	60	10,3333	65	60
104	DAFFA YUSRIA	X-D	92	92	54,8	60	88	81,6667	84	88
105	ERLIN NUR ISNAINI	X-D	84	84	92,2667	52	72	80	72	88
106	FARELLY ZACKY MAULANA	X-D	84	80	94,6667	92	60	88	68	84
107	FARISKHA MAYGA WARDHANI	X-D	88	88	74,5333	40	76	77,3333	88	72
108	IRZUDIN IVAN RIVALDO	X-D	55	60	75	20	66	74	80	72
109	ISNAINI FRESHIA ANGGRAINI	X-D	80	68	91,7333	72	88	100	72	80
110	LAILA NUR RAHMA	X-D	84	72	60	56	64	84	84	80
111	LISSA ANGGRAINI ARIFIN	X-D	84	84	76,4	44	80	79	80	68
112	MEYLA ESA ACHSANIA	X-D	88	80	81,7333	64	84	71,3333	84	76
113	MOHAMMAD ZIDAN FANANI	X-D	80	84	94,6667	44	76	88	72	84
114	MUHAMMAD YASIN PUTRA PRATIWI	X-D	80	72	86,1333	32	76	80	84	72
115	NADIA LAILATUSSA'ADAH	X-D	80	88	86,4	72	84	88	76	84
116	NAYARA CHERYL PUTRI BELLINAH	X-D	56	60	84	56	36	85,3333	60	76
117	NELA ELVARETA DESTYA MAHARANI	X-D	80	76	84,4	72	72	96	92	80
118	NUR KHOLIFAH	X-D	72	80	63,7333	64	68	95,6667	92	88
119	PRINSA DAFFA NANDA ARIFIN	X-D	88	88	70,9333	92	56	75	92	72
120	RAFEYFA FEYRUZ CHALISA	X-D	88	96	87,7333	88	100	100	92	88
121	RIO WILLIAM AIRLANGGA	X-D	80	72	94,6667	44	84	65	80	92
122	RIZKA ALIFIA PUTRI	X-D	72	80	90,1333	60	88	88	84	92
123	SEPTIAN CANDRA RAMADHAN	X-D	92	96	72,9333	40	84	77,3333	88	76
124	ZULIANA RAHMAWATI	X-D	72	76	51,3333	28	64	69,3333	64	72
125	MUHAMMAD GALANG SAPUTRA	X-D	76	68	66,9333	40	80	62,3333	72	68
126	NOVA OKTAVIA	X-D	84	76	64,2667	52	68	50,3333	76	68