

## LAMPIRAN

### Source Code Tampilan Halaman Kuesioner

```
<div class="container-fluid" style="max-width:50rem">

  <hr>
  <form method="post" id="form" action="kuisisioner/done" autocomplete="off">
    <div class="form-group">
      <label>
        <strong>
          <h4>Data Diri Responden</h4>
        </strong>
      </label>
      <div class="form-group mb-3">
        <label for="">
          Nama Lengkap
        </label>
        <input type="text" required placeholder="Nama Lengkap" name="nama"
class="form-control">
        <?php App::InputValidator('nama') ?>
      </div>
      <div class="form-group mb-3">
        <label for="">
          Jenjang Sekolah
        </label>
        <input type="text" required placeholder="Jenjang Sekolah"
name="jenjang_sekolah" class="form-control">
        <?php App::InputValidator('jenjang_sekolah') ?>
      </div>
    </div>
    <div>
      <h5><strong>
        Pilihlah salah satu jawaban dari setiap pernyataan yang menggambarkan diri
Anda !
      </strong></h5>
      <hr>
      <?php
foreach ($data['kriteria'] as $kriteria) {
  $i = 1;
  ?>
  <div class="form-group">
    <label>
      <strong>
        <h4><?=$kriteria['kriteria'] ?></h4>
```

```

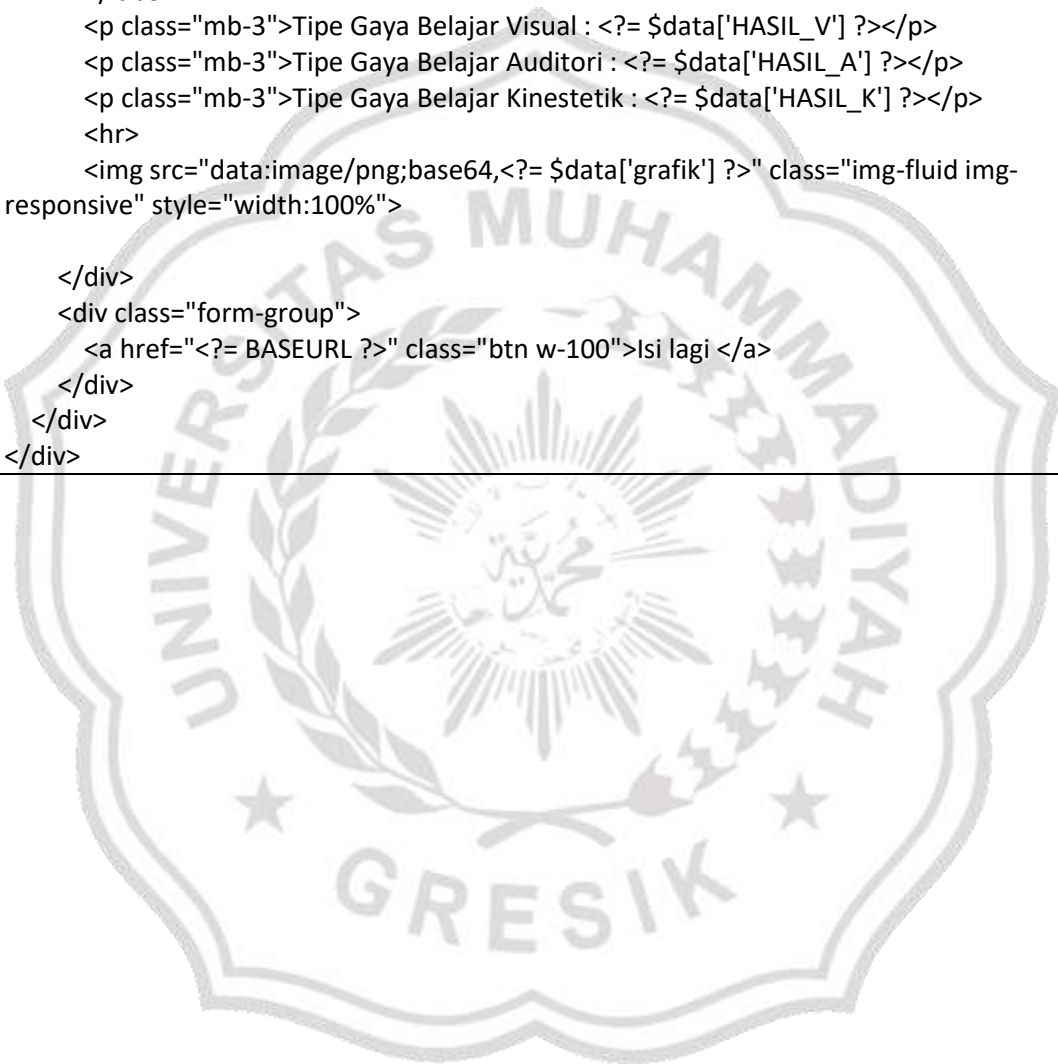
</strong>
</label>
<?php while (isset($data['pertanyaan'][$kriteria['kode'] . "_" . $i])) {
    $pertanyaan = $data['pertanyaan'][$kriteria['kode'] . "_" . $i++];
    ?>
    <p class="mt-4"><?= $pertanyaan['pertanyaan'] ?></p>
    <hr>
    <input type="radio" value="1" name="<?= $pertanyaan['kode'] ?>"
required>
    <span>Sangat Tidak Setuju</span><br>
    <input type="radio" value="2" name="<?= $pertanyaan['kode'] ?>"
required>
    <span>Tidak Setuju</span><br>
    <input type="radio" value="3" name="<?= $pertanyaan['kode'] ?>"
required>
    <span>Netral</span><br>
    <input type="radio" value="4" name="<?= $pertanyaan['kode'] ?>"
required>
    <span>Setuju</span><br>
    <input type="radio" value="5" name="<?= $pertanyaan['kode'] ?>"
required>
    <span>Sangat Setuju</span><br>
    <?php App::InputValidator($pertanyaan['kode']) ?>
    <hr>
    <?php } ?>
</div>
<hr>
<?php ?>
<div class="form-group">
    <input type="submit" class="btn w-100" value="Submit Kuesioner"
name="kuisisioner">
    </div>
</form>
</div>
<?php
if (isset($_SESSION['InputError'])) unset($_SESSION['InputError']);
?>

```

### Source Code Tampilan Halaman Hasil Kuesioner

```
<div class="container-fluid" style="max-width:50rem">
  <div id="form">
    <div class="form-group mb-3">
      <label for="">
        <strong>
          <h5>Tipe Gaya Belajar Anda </h5>
        </strong>
      </label>
      <p class="mb-3">Tipe Gaya Belajar Visual : <?=$data['HASIL_V'] ?></p>
      <p class="mb-3">Tipe Gaya Belajar Auditori : <?=$data['HASIL_A'] ?></p>
      <p class="mb-3">Tipe Gaya Belajar Kinestetik : <?=$data['HASIL_K'] ?></p>
      <hr>
      

    </div>
    <div class="form-group">
      <a href="<?=$BASEURL ?>" class="btn w-100">Isi lagi </a>
    </div>
  </div>
</div>
```



## Source Code Tampilan Halaman Riwayat

```
<div class="container">
  <div class="table-responsive">
    <table class="table table-responsive table-hover table-sm table-bordered myTable"
id="FormatTable">
      <thead class="sticky-top">
        <tr>
          <th>Link</th>
          <th>Nama Lengkap</th>
          <th>Jenjang Sekolah</th>
          <?php foreach ($data['checklist'] as $kriteria) { ?>
            <?php
              $i = 1;
              foreach ($kriteria['pertanyaan'] as $key => $value) {
                $answer_order[] = $key;
              ?>
              <th><?="P" . $i++ // $value['kode']
                ?></th>
              <?php } ?>
            <?php } ?>
          <th>Skor Visual</th>
          <th>Skor Auditori</th>
          <th>Skor Kinestetik</th>
          <th>Hasil Visual</th>
          <th>Hasil Auditori</th>
          <th>Hasil Kinestetik</th>
        </tr>
      </thead>
      <tbody>
        <?php
          foreach ($data['Kuisisioner'] as $kuisisioner) {
            ?>
            <tr>
              <td data-label="link">
                <a href="<?=" BASEURL ?>/kuisisioner/history?id=<?=" $kuisisioner['id'];
?>"></a>
              </td>
              <td data-label="Nama Lengkap">
                <?=" $kuisisioner['nama']; ?>
              </td>
              <td data-label="Jenjang Sekolah">
                <?=" $kuisisioner['jenjang_sekolah']; ?>
              </td>
              <?php foreach ($answer_order as $kuisisioner_id) { ?>
                <td data-label="<?=" $kuisisioner_id ?>">
                  <?=" $kuisisioner[$kuisisioner_id]; ?>
                </td>
              </td>
            </tr>
          </tbody>
        </table>
      </div>
    </div>
  </div>
```

```
<?php } ?>
<td data-label="Skor Visual">
  <?= $kuisisioner['V']; ?>
</td>
<td data-label="Skor Auditori">
  <?= $kuisisioner['A']; ?>
</td>
<td data-label="Skor Kinestetik">
  <?= $kuisisioner['K']; ?>
</td>
<td data-label="Hasil Visual">
  <?= $kuisisioner['HASIL_V']; ?>
</td>
<td data-label="Hasil Auditori">
  <?= $kuisisioner['HASIL_A']; ?>
</td>
<td data-label="Hasil Kinestetik">
  <?= $kuisisioner['HASIL_K']; ?>
</td>
</tr>
<?php
}
?>
</tbody>
</table>
</div>
</div>
<script>
  document.querySelector("#Kuisisioner").classList.add("active");
</script>
```

## Source Code Proses Fuzzy Output

```
import numpy as np
import skfuzzy as fuzz
import matplotlib.pyplot as plt
import argparse
import io
import base64

# Menentukan Variabel
universe = np.arange(0, 101, 1)

kd = fuzz.trapmf(universe, [0, 0, 10, 40])
d = fuzz.trimf(universe, [10, 40, 70])
sd = fuzz.trapmf(universe, [40, 70, 100, 100])

def membership_function(value):
    result = {}
    result['Kurang Direkomendasi'] = fuzz.interp_membership(universe, kd, value)
    result['Direkomendasikan'] = fuzz.interp_membership(universe, d, value)
    result['Sangat Direkomendasi'] = fuzz.interp_membership(universe, sd, value)

    return result

# Parse command-line arguments
parser = argparse.ArgumentParser()
parser.add_argument("a", type=float, help="Visual")
parser.add_argument("b", type=float, help="Auditori")
parser.add_argument("c", type=float, help="Kinestetik")
args = parser.parse_args()

visual_z = membership_function(args.a)
auditori_z = membership_function(args.b)
kinestetik_z = membership_function(args.c)

visual_hasil = max(visual_z, key=visual_z.get)
auditori_hasil = max(auditori_z, key=auditori_z.get)
kinestetik_hasil = max(kinestetik_z, key=kinestetik_z.get)

# Plotting the membership functions
fig, ax = plt.subplots(3, 1, figsize=(8, 12))

# Visual
ax[0].plot(universe, kd, 'r', linewidth=1.5, label='Kurang Direkomendasi')
ax[0].plot(universe, d, 'g', linewidth=1.5, label='Direkomendasikan')
ax[0].plot(universe, sd, 'b', linewidth=1.5, label='Sangat Direkomendasi')
ax[0].set_title('Keangotaan Visual')
ax[0].axvline(x=args.a, color='k', linestyle='--')
```

```
ax[0].legend()

# Auditori
ax[1].plot(universe, kd, 'r', linewidth=1.5, label='Kurang Direkomendasi')
ax[1].plot(universe, d, 'g', linewidth=1.5, label='Direkomendasikan')
ax[1].plot(universe, sd, 'b', linewidth=1.5, label='Sangat Direkomendasi')
ax[1].set_title('Keanggotaan Auditori')
ax[1].axvline(x=args.b, color='k', linestyle='--')
ax[1].legend()

# Kinestetik
ax[2].plot(universe, kd, 'r', linewidth=1.5, label='Kurang Direkomendasi')
ax[2].plot(universe, d, 'g', linewidth=1.5, label='Direkomendasikan')
ax[2].plot(universe, sd, 'b', linewidth=1.5, label='Sangat Direkomendasi')
ax[2].set_title('Keanggotaan Kinestetik')
ax[2].axvline(x=args.c, color='k', linestyle='--')
ax[2].legend()

plt.tight_layout()

# Save plot to a BytesIO object
buf = io.BytesIO()
plt.savefig(buf, format='png')
buf.seek(0)
image_base64 = base64.b64encode(buf.read()).decode('utf-8')
buf.close()

result = {
    'visual': visual_hasil,
    'auditori': auditori_hasil,
    'kinestetik': kinestetik_hasil,
}

print(result, '|||', image_base64) # imgElement.src =
`data:image/png;base64,${result.grafik}`
```

## Data Kuesioner

Nama	Pendidikan	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	K11	K12			
Savira Auliya Ardana	Perguruan Tinggi	5	2	1	1	1	5	5	1	1	1	1	1	1	5	2	5	3	5	1	5	5	2	5	1	1	1	4	5	2	5	5	3	1	1	5	1			
Izzafi Ramdhani Al-Kaff	Perguruan Tinggi	4	3	5	2	5	4	4	1	3	4	3	5	4	5	4	4	2	5	3	4	5	4	2	4	3	4	3	3	5	5	4	3	4	5	1				
Adelia Ananda Ayuningtyas	Perguruan Tinggi	3	3	2	2	4	4	2	2	1	3	4	3	4	3	4	2	2	3	2	3	3	4	3	2	2	1	4	2	2	4	4	3	4	3	4	5	2		
Choiul rozqiin	Perguruan Tinggi	1	3	4	2	4	4	4	3	4	4	3	4	3	4	4	4	4	2	4	3	5	3	4	2	4	4	4	4	4	4	3	3	5	3	5	3			
Muhammad Faris Kamaaluddin	Perguruan Tinggi	4	2	2	2	4	4	2	2	4	4	4	2	4	4	4	4	2	4	4	4	4	4	2	4	2	4	2	4	4	4	4	4	4	4	4	2	4	2	
Nablia Zatacinia	Perguruan Tinggi	4	3	1	2	5	4	5	2	2	3	2	4	3	5	2	3	1	5	2	3	3	2	4	1	3	3	3	2	4	4	3	2	4	3	2	4	1		
Sholihatun Fitriyah	Perguruan Tinggi	3	3	3	4	5	3	5	3	5	2	3	3	3	2	5	3	3	5	5	5	5	5	3	5	3	3	3	3	3	5	3	5	3	3	5	5	5		
M.Chusni Tamimi	Perguruan Tinggi	4	3	1	2	5	3	5	3	3	3	3	3	4	3	3	3	3	4	3	4	4	4	4	3	4	2	2	3	3	4	3	3	3	3	3	3	3		
Muhammad Zaky Al Mubarak	Perguruan Tinggi	2	2	5	2	5	4	5	4	2	2	4	3	2	3	4	4	4	2	3	4	4	4	4	3	2	3	4	4	4	3	2	4	3	2	4	2	4	4	
Fadiyah Ayu Puspita	Perguruan Tinggi	2	3	2	4	2	2	3	3	4	4	3	4	5	5	3	4	4	5	4	5	5	4	3	3	4	4	3	4	5	5	4	4	5	5	4	5	5	3	
Bariza Nurus Shobah	Perguruan Tinggi	4	3	1	1	3	4	4	3	2	4	2	3	3	3	4	2	4	2	4	3	4	2	4	2	3	3	3	1	2	5	5	2	1	5	2	1	3	3	1
Atiqotul Rizqiyah	Perguruan Tinggi	4	2	2	5	4	4	4	4	1	3	2	4	5	3	2	2	4	2	4	2	3	3	2	2	2	4	4	2	4	4	5	2	4	4	5	2	4	5	
Atifahut Sa'diyah	Perguruan Tinggi	5	3	1	5	4	5	4	1	2	1	1	1	1	5	5	4	5	5	5	4	3	3	1	2	1	1	5	2	5	3	5	1	5	3	5	1	1	5	
Hidayatul Nur Hanifah	Perguruan Tinggi	4	3	4	3	5	4	5	4	4	4	4	4	4	3	4	3	5	5	4	4	5	5	4	5	4	5	4	5	4	5	5	2	3	5	2	3	5	5	
M. Syaifiq Izzuddin	Perguruan Tinggi	5	4	1	3	1	4	1	1	1	5	3	5	5	5	5	5	5	5	5	4	5	5	4	3	5	5	1	5	4	3	4	5	4	5	2	5	3	3	
Sayma	SMA/Sederajat	5	2	1	2	4	4	3	3	4	3	3	3	4	3	2	1	1	2	3	3	3	3	3	3	3	3	3	3	4	3	3	4	3	3	3	3	3	3	3
Talitha Aurelia Mirabel	SMA/Sederajat	4	3	3	4	5	3	4	2	4	2	4	4	4	5	3	4	3	5	4	3	4	4	3	4	5	3	4	4	3	4	3	4	3	4	3	4	4	4	4
Muhammad Nauval Rizky	SMA/Sederajat	4	3	4	4	3	4	3	2	3	3	3	2	2	4	2	4	4	1	5	4	4	2	5	1	3	5	1	5	3	3	4	4	2	4	2	5	4	4	
Ciara	SMA/Sederajat	4	2	2	2	5	4	4	3	3	5	4	3	3	2	2	3	4	4	4	4	2	5	2	3	5	3	3	3	3	5	2	2	2	2	2	2	4	5	
Anggun Agassia Ramadhani	SMA/Sederajat	5	3	3	2	4	4	2	3	2	2	4	4	3	3	4	2	4	4	3	5	3	4	4	3	1	3	2	2	4	5	4	3	2	4	5	4	4	2	
Briiyana	SMA/Sederajat	5	5	2	4	3	4	5	5	3	4	5	2	4	2	1	1	3	2	2	5	5	1	1	1	1	5	1	1	4	2	2	1	3	5	4	2	2	2	
Amalia Cahya Ningrum	SMA/Sederajat	4	3	4	2	3	2	4	5	4	3	4	4	3	4	3	4	3	3	4	5	3	4	5	4	3	4	4	3	4	4	3	4	4	2	3	4	4	4	
Jauhar Rasyad	SMA/Sederajat	2	2	3	2	4	3	5	3	2	4	4	2	4	5	5	4	5	4	5	2	4	5	2	4	4	3	2	5	2	3	4	2	3	4	3	4	3	3	
Henri Ayu Fitriani	SMA/Sederajat	4	3	5	3	4	3	4	1	2	4	3	2	2	4	2	4	2	5	3	3	2	4	4	3	3	3	4	4	5	4	4	4	4	4	4	4	4	2	
Nova Ilhan Sabrina	SMA/Sederajat	5	3	5	2	5	5	5	2	2	4	5	5	5	5	4	5	5	5	5	5	5	5	4	5	2	1	4	2	5	5	3	2	5	5	3	2	2	3	5
Fitri Layimust Tsani	SMA/Sederajat	4	3	4	2	4	4	4	4	2	4	3	3	4	1	3	4	2	4	4	4	4	4	3	4	3	3	3	3	3	5	4	3	2	2	4	4	4		
Ahmad Nur Haikal Fakry	SMA/Sederajat	5	5	2	2	5	5	5	4	5	5	3	2	2	5	2	4	1	5	1	5	5	1	3	3	1	4	1	3	5	5	2	5	5	2	5	3	5	5	
Rofiqoh Endah Lestari	SMA/Sederajat	3	3	2	3	3	3	3	4	3	4	3	4	4	3	5	5	3	3	3	2	4	4	3	2	4	3	3	3	2	3	2	4	3	3	3	3	2	2	
Moh. Akhror Syawwali	SMA/Sederajat	5	1	5	1	5	5	5	3	5	5	4	5	5	5	5	5	5	5	5	3	1	5	5	1	5	5	1	5	3	5	1	5	5	1	5	5	1	5	1
Dev Amalia Putri	SMA/Sederajat	5	4	3	3	5	4	5	2	3	5	3	5	4	4	4	4	5	5	5	5	5	3	4	3	2	2	5	2	5	5	3	2	1	3	5	3	5	3	



Nama	Pendidikan	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	K11	K12		
Cindy Lukyta Nur Aini	SMP/Sederajat	4	2	2	2	3	3	4	3	2	3	3	5	5	4	3	3	3	3	4	4	4	3	3	3	2	1	4	1	4	3	3	4	3	2	3	2		
Rama Revanno Putra	SMP/Sederajat	5	3	3	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Alif Abdurahman Nasuha	SMP/Sederajat	3	2	5	1	4	2	4	4	2	4	4	4	2	4	2	5	3	5	2	3	2	2	4	2	2	4	2	3	3	3	4	2	5	3	2	5		
Desy Windythree Larasati	SMP/Sederajat	5	1	2	1	2	1	5	3	1	2	3	2	4	1	1	4	3	2	5	2	5	1	3	5	5	2	3	3	3	1	2	4	3	5	5	5		
Rei cakra	SMP/Sederajat	2	2	5	1	4	1	3	5	3	5	1	1	5	5	1	4	2	2	4	4	4	3	4	4	3	4	3	2	2	3	3	3	2	2	2	3		
Veyla Pinata	SMP/Sederajat	2	1	3	5	3	5	5	2	3	3	3	2	3	5	5	4	5	5	4	5	5	4	3	5	3	5	3	5	5	5	5	2	5	2	5	5		
Zaskia Alya	SMP/Sederajat	5	4	3	2	5	4	4	2	3	4	3	4	2	5	3	5	3	5	4	5	5	2	3	3	2	3	4	4	4	5	4	3	3	5	2			
Farei Adelio Al Khosy	SMP/Sederajat	2	2	2	2	4	4	2	2	1	2	2	4	4	4	4	2	3	4	4	2	5	4	2	5	4	2	5	4	2	4	4	4	5	4	4	4		
Muthia Ainun Hafidzah	SMP/Sederajat	5	3	1	2	5	3	4	2	5	2	2	5	1	5	2	1	2	4	3	5	2	3	5	2	1	4	2	1	5	4	1	2	3	2	3	1		
Muhammad Fachri Aziz	SMP/Sederajat	5	2	5	2	4	5	5	1	1	5	3	4	5	3	3	5	4	5	4	4	5	5	3	3	3	5	4	2	5	4	5	2	4	5	2	4	5	3
Rafa Fanani Al Habisy	SMP/Sederajat	5	5	5	1	5	5	5	1	3	5	5	1	3	2	3	2	3	1	2	1	4	5	5	4	3	4	5	2	5	4	5	2	5	1	5	1	5	
M. Satrio Aji Sedewo	SMP/Sederajat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	2	3	2	1	2	1	1	4	4	3	1	1	1	
Cherly	SMP/Sederajat	4	2	2	2	3	1	4	1	1	2	2	4	2	4	2	5	1	5	4	4	4	3	3	4	2	4	2	4	5	2	4	2	3	4	1	4	3	
M. Ihwan Abdillah	SMP/Sederajat	5	4	3	1	4	2	5	4	4	4	1	3	3	2	5	4	1	4	3	1	4	4	1	1	1	5	5	3	2	2	4	3	4	4	4	4	5	
Dini Miratu Indri	SMP/Sederajat	4	3	1	2	4	4	4	3	3	5	4	5	3	2	1	2	3	3	2	1	2	3	2	4	3	4	2	1	4	1	3	3	2	3	2	3	2	
M. Said Abbas	SD/MI	4	1	4	1	1	4	1	1	3	4	3	4	4	4	2	3	4	4	4	3	5	1	3	2	1	3	2	1	3	4	5	2	3	3	2	4	1	
Anmad Syamsa Dhuha	SD/MI	4	2	3	2	3	3	4	3	2	2	4	3	4	3	4	3	4	3	5	4	4	5	3	4	5	3	4	5	4	2	3	3	5	2	3	5		
Nur Fitri Amaliyah	SD/MI	3	1	1	4	3	4	5	1	1	2	2	3	3	4	2	5	3	4	3	3	4	5	4	4	3	3	5	1	2	4	4	3	3	2	2	1	3	
Khanza Aliesya Maharani	SD/MI	4	4	2	4	4	2	4	2	4	2	2	4	2	2	2	2	2	2	2	2	2	2	4	2	2	2	4	2	4	4	4	4	4	4	4	4	2	4
Zahira assyifa	SD/MI	5	3	2	4	5	5	5	5	3	5	5	5	1	5	4	4	1	1	5	5	3	5	5	5	3	3	5	2	5	5	5	5	5	1	5	5	5	
Rivaldy Bagus Fikriansyah	SD/MI	3	4	2	2	5	4	4	2	3	3	3	3	2	3	2	3	4	4	3	3	2	4	4	4	2	3	4	2	3	2	3	2	3	4	3	3	3	
Syahnul	SD/MI	3	3	4	4	4	4	4	3	3	5	4	3	2	2	1	2	4	4	5	2	3	5	4	4	4	2	5	4	5	4	4	4	4	3	1	4	4	
Siti fatimatur robiah	SD/MI	2	2	4	3	2	2	4	1	3	1	2	1	1	2	1	3	4	3	1	5	1	3	1	5	2	4	4	3	3	1	5	1	3	5	1	3	3	
Nazwa nur khabibah	SD/MI	4	1	2	5	3	1	2	5	1	3	4	2	5	1	3	2	2	5	5	2	5	1	2	3	1	3	1	5	1	4	1	3	1	2	4	3	3	
Nasywa adibah zulata	SD/MI	4	2	3	1	4	5	1	3	4	5	3	2	2	3	4	3	1	5	3	4	1	5	3	2	4	3	1	3	4	2	2	5	2	5	3	1	1	
Natasya aurelia	SD/MI	4	1	2	5	5	3	3	2	3	4	4	5	2	4	1	3	4	5	2	4	1	4	2	3	3	3	5	3	2	4	4	5	3	2	3	5		
Nilina hiiwatillah azzahra	SD/MI	3	4	1	2	5	4	2	1	3	4	3	2	5	5	1	3	2	5	4	2	3	1	4	4	3	1	2	2	3	3	4	5	2	4	1	3	3	
Afin	SD/MI	5	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Faza Zanuba Arifah	SD/MI	5	2	3	5	3	3	4	2	4	3	4	2	4	3	2	4	2	4	2	4	3	2	2	3	2	2	4	5	3	2	4	5	3	2	4	4	4	3
Putri Kamelia Rizky	SD/MI	5	4	3	5	4	2	5	1	1	3	3	1	5	5	4	3	5	5	5	5	3	1	1	4	5	5	5	4	1	5	3	1	3	1	3	3	5	