

LAPORAN PRAKTIKUM 1



Dosen Pengajar:

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TI 3B

PROGRAM STUDI D3 TEKNIK INFORMATIKA

POLITEKNIK PURBAYA

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BAB I

1.1 Pendahuluan

PHP adalah bahasa pemrograman yang digunakan untuk mengembangkan aplikasi web sederhana. PHP berjalan di sisi server, artinya kode PHP dieksekusi di sisi server, lalu hasilnya dikirimkan ke browser dalam bentuk HTML.

PHP pertama kali dikembangkan oleh Rasmus Lerdorf pada tahun 1994 dan hingga kini terus berkembang dengan berbagai versi baru yang lebih stabil dan kaya fitur

1.2 Kelebihan dan Kekurangan PHP

Kelebihan :

- Gratis dan Open-source
- Komunitas besar dan dokumentasi lengkap
- Mudah digunakan untuk pemula
- Mendukung berbagai framework (Laravel, CodeIgniter, Symfony)

Kekurangan :

- Kurang cocok untuk aplikasi desktop
- Jika tidak dikelola dengan baik, rawan celah keamanan
- Beberapa fitur lama sudah deprecated sehingga butuh update rutin

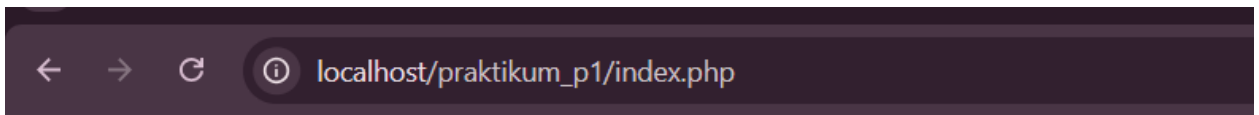
BAB II

PEMBAHASAN

2.1

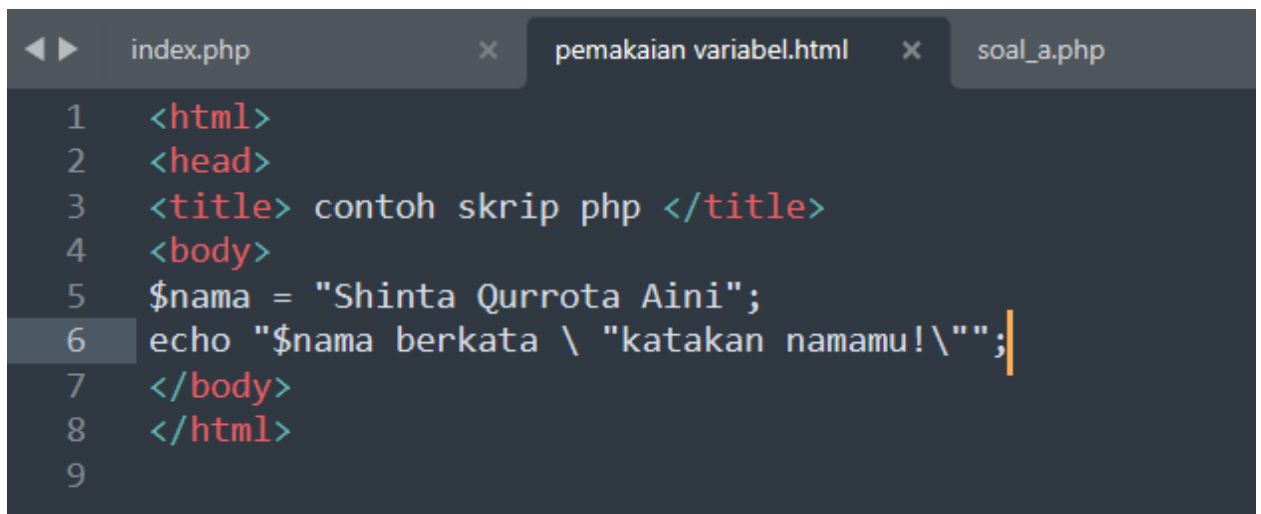


```
C:\xampp1\htdocs\praktikum_p1\index.php - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
index.php x pemakaian variabel.html x soal_a.php x soal_b.php x soal_c.php x
1 <?php
2     $a = 10;
3     $b = "test";
4     echo "dengan quote -> ";
5     echo "nilai $b ku $a ";
6     echo "dengan apostrophe -> ";
7     echo 'nilai $b ku $a'
8 ?>
9
10
```

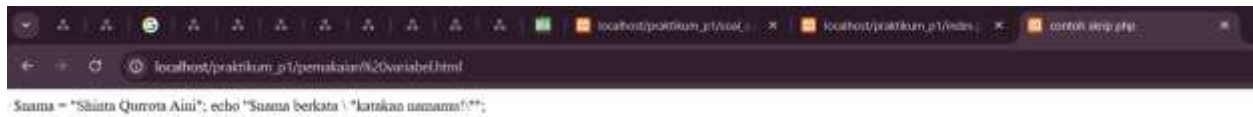


dengan quote -> nilai test ku 10 dengan apostrophe -> nilai \$b ku \$a

2.2 Pemakaian Variabel

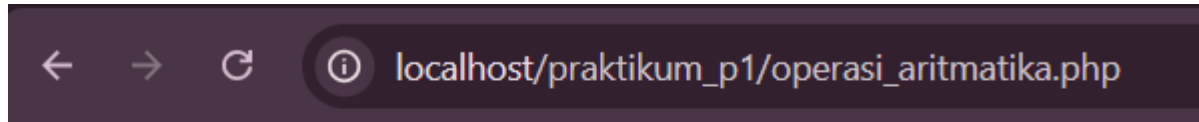
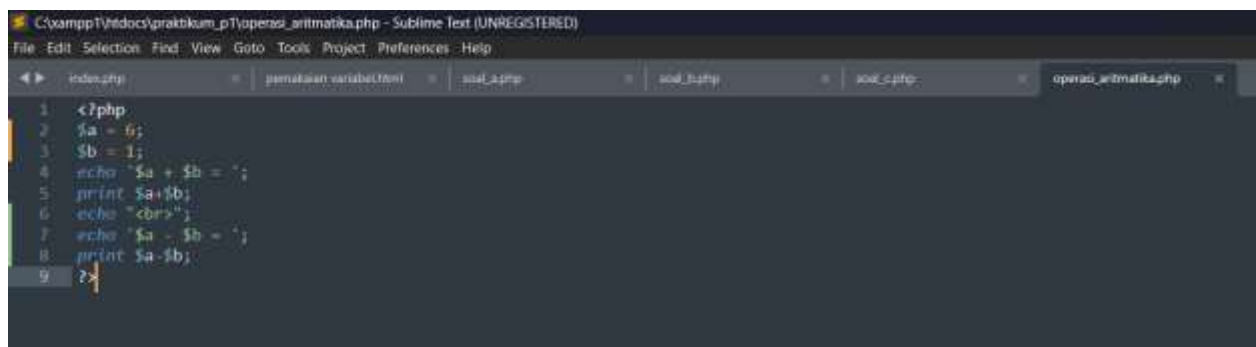


```
index.php x pemakaian_variabel.html x soal_a.php
1 <html>
2 <head>
3 <title> contoh skrip php </title>
4 <body>
5 $nama = "Shinta Qurrota Aini";
6 echo "$nama berkata \"katakan namamu!\"";
7 </body>
8 </html>
9
```



2.3 Operasi Aritmatika

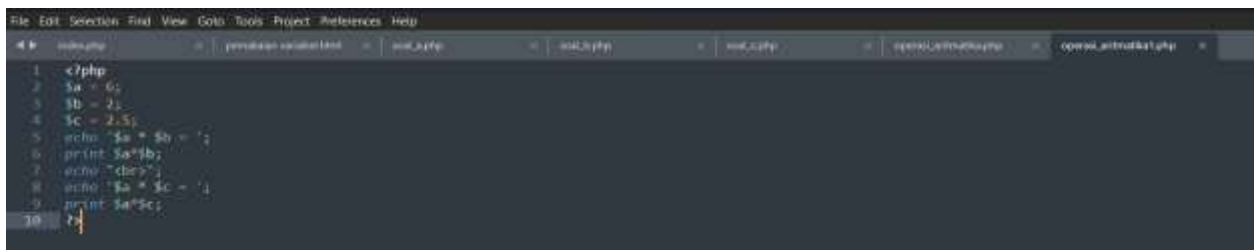
2.3.1 Operasi Penjumlahan dan Pengurangan



Sa + \$b = 7

Sa - \$b = 5

2.3.2 Operasi Perkalian



← → ↻ ⓘ localhost/praktikum_p1/operasi_aritmatika1.php

$\$a * \$b = 12$

$\$a * \$c = 15$

2.3.3 Operasi Pembagian

```
File Edit Selection Find View Goto Tools Project Preferences Help
< idia.php | pemaknaan variabel.html | soal_a.php | soal_b.php | soal_c.php | operasi_aritmatika.php | operasi_aritmatika1.php | operasi_aritmatika2.php
1 <?php
2 $a = 6;
3 $b = 4;
4 $c = 4.0;
5 $d = 5;
6 $e = 3;
7 echo '$a / $b = ' ;
8 print $a/$b;
9 echo "<br>";
10 echo '$a / $c = ' ;
11 print $a/$c;
12 echo "<br>";
13 echo '$a % $d = ' ;
14 print $a%$d;
15 echo "<br>";
16 echo '$a % $b = ' ;
17 print $a%$b;
18 echo "<br>";
19 echo '$a % $e = ' ;
20 print $a%$e;
21 ?>
```

← → ↻ ⓘ localhost/praktikum_p1/operasi_aritmatika2.php

$\$a / \$b = 1.5$

$\$a / \$c = 1.5$

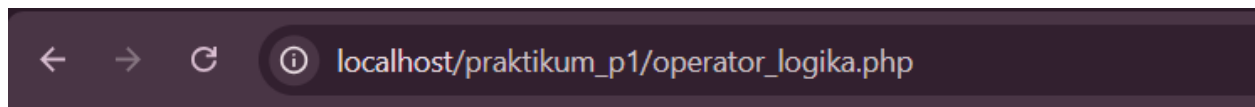
$\$a \% \$d = 1$

$\$a \% \$b = 2$

$\$a \% \$e = 0$

2.4 Operator Logika

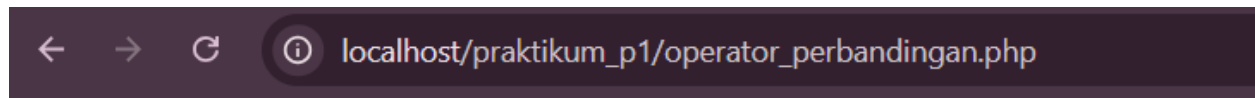
```
File Edit Selection Find View Goto Tools Project Preferences Help
operator_logika.php
1 <?php
2 $b = 41-4;
3 $c = 3+7==10;
4 $a = ($b and $c);
5 echo "\$a=$a <BR>";
6 $a = ($b or $c);
7 echo "\$a=$a <BR>";
8 $a = ($b xor $c);
9 echo "\$a=$a <BR>";
10 $a = ($b or $c);
11 echo "\$a=$a <BR>";
12 $a = $b && $c;
13 echo "\$a=$a <BR>";
14 $a = $b || $c;
15 echo "\$a=$a <BR>";
16 ?>
```



Sa=
Sa=1
Sa=1
Sa=1
Sa=
Sa=1

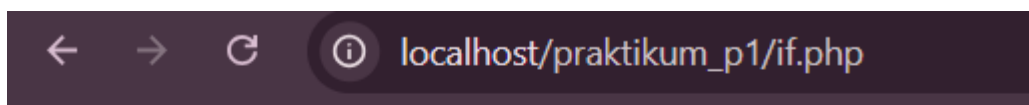
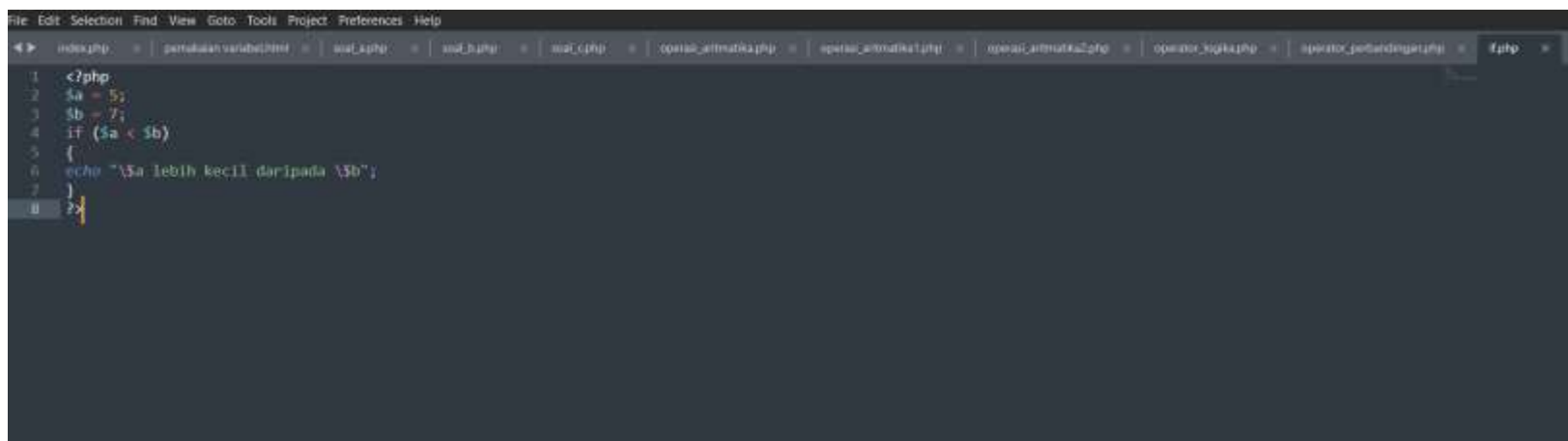
2.5 Operator Perbandingan

```
File Edit Selection Find View Goto Tools Project Preferences Help
operator_perbandingan.php
1 <?php
2 $a = 4;
3 $b = ($a == 4);
4 echo "\$a = $a <BR>";
5 $b = ($a == "4");
6 echo "\$b = $b <BR>";
7 $c = ($a != 4);
8 echo "\$c = $c <BR>";
9 $d = ($a != "4");
10 echo "\$d = $d <BR>";
11 $e = ($a < 5);
12 echo "\$e = $e <BR>";
13 $f = ($a > 3);
14 echo "\$f = $f <BR>";
15 $g = ($a <= 4);
16 echo "\$g = $g <BR>";
17 $h = ($a >= 5);
18 echo "\$h = $h <BR>";
19 ?>
```



\$a = 1
\$b =
\$c =
\$d = 1
\$e = 1
\$f =
\$g = 1
\$h =

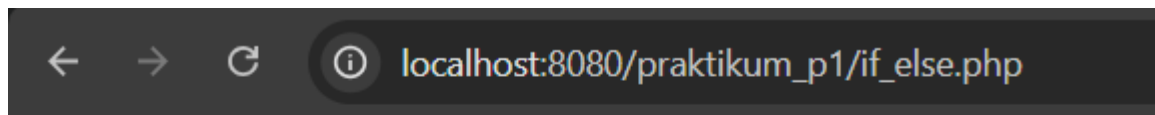
2.6 Struktur Kontrol : IF



\$a lebih kecil daripada \$b

2.7 Struktur Kontrol : IF – ELSE

```
File Edit Selection Find View Goto Tools Project Preferences Help
<> |||| operasi_aritmatika operasi_aritmatika2.php < operator_logika.php < operator_perbandingan.php < if.php < if_else.php <
1 <?php
2 $a = 5;
3 $b = 3;
4 echo "\$a = $a <BR>";
5 echo "\$b = $b <BR>";
6 if ($a < $b)
7 {
8 echo '$a lebih kecil daripada $b';
9 }
10 else
11 {
12 echo '$a lebih besar daripada $b';
13 }
14 ?>
15
```



\$a = 5
\$b = 3
\$a lebih besar daripada \$b

2.8 Kontrol : IF-ELSE lainnya

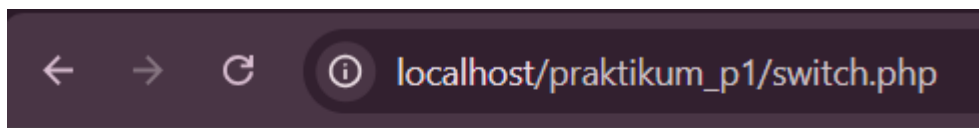
```
File Edit Selection Find View Goto Tools Project Preferences Help
<> < operasi_aritmatika.php < operasi_aritmatika2.php < operasi_aritmatika3.php < operator_logika.php < operator_perbandingan.php < if.php < if_else.php < if_elseif.php <
1 <?
2 $a = 5;
3 $b = 7;
4 echo "\$a = $a <BR>";
5 echo "\$b = $b <BR>";
6 if ($a == $b);
7 echo '$a sama dengan $b';
8 elseif ($a > $b);
9 echo '$a lebih besar daripada $b';
10 else;
11 echo '$a lebih kecil daripada $b';
12 endif;
13 ?>
14
15
```



\$a = 5
\$b = 7
\$a lebih kecil daripada \$b

2.9 Struktur Kontrol : Switch

```
File Edit Selection Find View Goto Tools Project Preferences Help
switch.php
1 <?php
2 $a = 5;
3 switch ($a) {
4 case 0:
5 echo 'Sa sama dengan 0';
6 break;
7 case 1:
8 echo 'Sa sama dengan 1';
9 break;
10 case 2:
11 echo 'Sa sama dengan 2';
12 break;
13 default:
14 echo 'Sa tidak sama dengan 0, 1, atau 2';
15 }
16 ?>
17
```



Sa tidak sama dengan 0, 1, atau 2

2.10 Struktur Kontrol : While

```
File Edit Selection Find View Goto Tools Project Preferences Help
while.php
1 <?php
2 echo "<h3> Cara 1 </h3>";
3 $i = 1;
4 while ($i <= 10)
5 {
6 print $i++;
7 }
8 echo "<BR>";
9 echo "<h3> Cara 2 </h3>";
10 $i = 1;
11 while ($i <= 10):
12 print $i;
13 $i++;
14 endwhile;
15 ?>
16
```



Cara 1

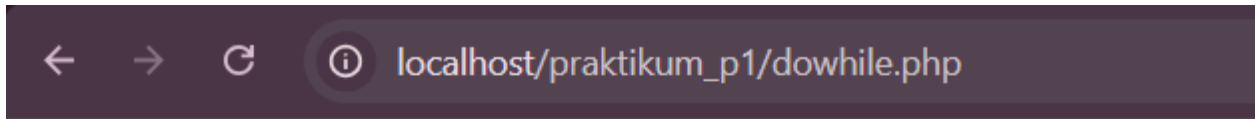
12345678910

Cara 2

12345678910

2.11 Struktur Kontrol : Do....While

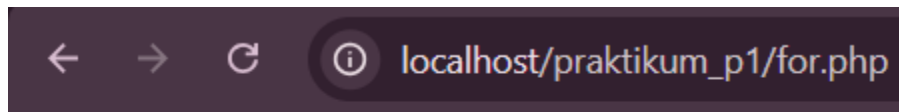
```
File Edit Selection Find View Goto Tools Project Preferences Help
< > ||| src_5.php | src_5.php | operator_aritmatika1.php | operator_aritmatika2.php | operator_aritmatika3.php | operator_logika.php | operator_pertbandingan.php | if.php | if_else.php | if_else2.php | while.php | dowhile.php |
1 <?php
2 $i = 2;
3 do
4 {
5     echo "<math>\$i = \$i</math><br>";
6     $i++;
7 }
8 while ($i < 5);
9 >
10
```



$\$i = 2$
 $\$i = 3$
 $\$i = 4$

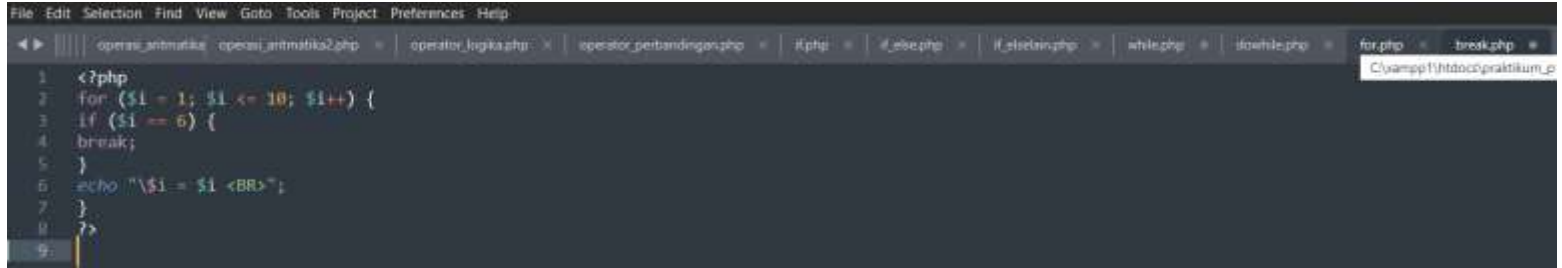
2.12 Struktur Kontrol : For

```
File Edit Selection Find View Goto Tools Project Preferences Help
< > ||| src_2.php | operator_aritmatika1.php | operator_aritmatika2.php | operator_aritmatika3.php | operator_logika.php | operator_pertbandingan.php | if.php | if_else.php | if_else2.php | while.php | dowhile.php | for.php |
1 <?php
2 for ($i=1; $i<=10; $i++) {
3     print $i;
4 }
5 >
6
```

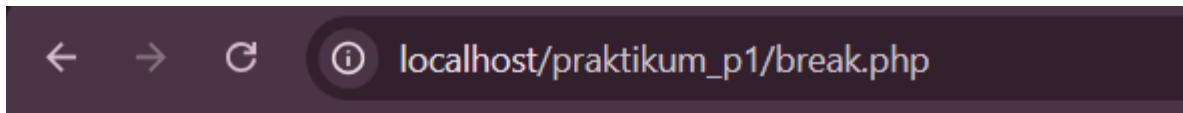


12345678910

2.13 Struktur Kontrol : Break

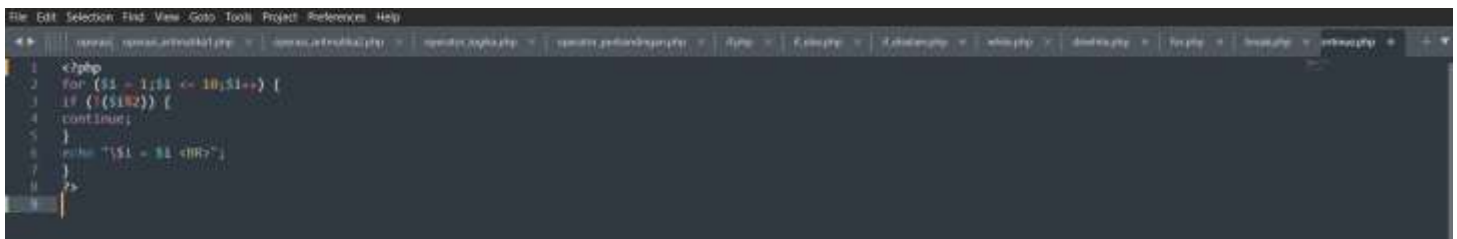


```
1 <?php
2 for ($i = 1; $i <= 10; $i++) {
3     if ($i == 6) {
4         break;
5     }
6     echo "\$i = $i <BR>";
7 }
8 ?>
```

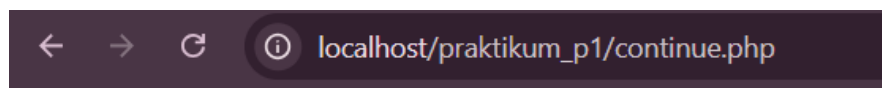


\$i = 1
\$i = 2
\$i = 3
\$i = 4
\$i = 5

2.14 Struktur Kontrol : Continue



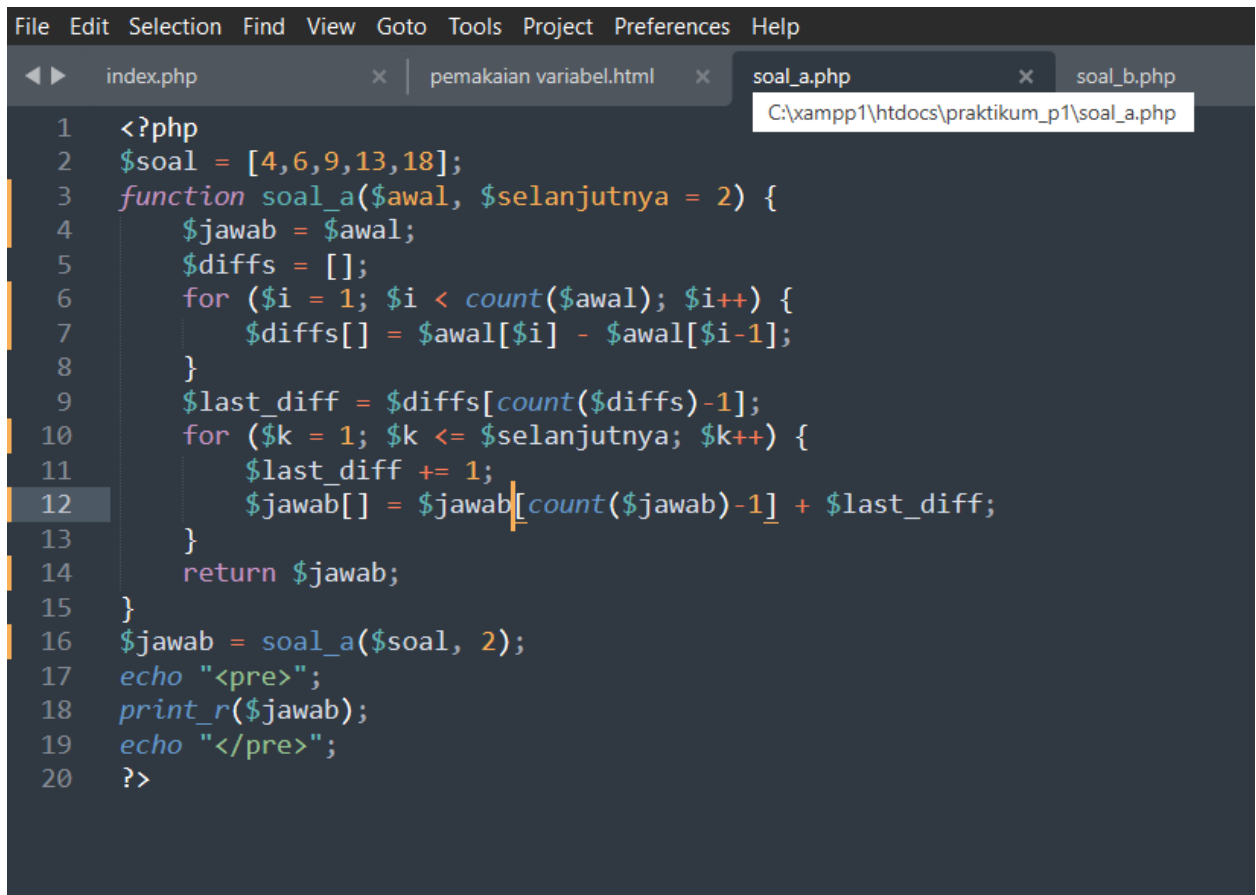
```
1 <?php
2 for ($i = 1; $i <= 10; $i++) {
3     if ($i % 2 == 0) {
4         continue;
5     }
6     echo "\$i = $i <BR>";
7 }
8 ?>
```



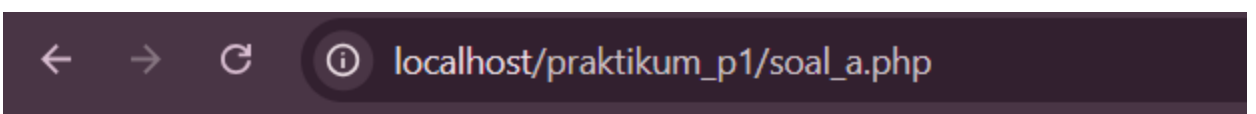
\$i = 1
\$i = 3
\$i = 5
\$i = 7
\$i = 9

2.15 Tugas psyko

a) 4, 6, 9, 13, 18, ?, ?



```
1 <?php
2 $soal = [4,6,9,13,18];
3 function soal_a($awal, $selanjutnya = 2) {
4     $jawab = $awal;
5     $diffs = [];
6     for ($i = 1; $i < count($awal); $i++) {
7         $diffs[] = $awal[$i] - $awal[$i-1];
8     }
9     $last_diff = $diffs[count($diffs)-1];
10    for ($k = 1; $k <= $selanjutnya; $k++) {
11        $last_diff += 1;
12        $jawab[] = $jawab[count($jawab)-1] + $last_diff;
13    }
14    return $jawab;
15 }
16 $jawab = soal_a($soal, 2);
17 echo "<pre>";
18 print_r($jawab);
19 echo "</pre>";
20 ?>
```



```
Array
(
    [0] => 4
    [1] => 6
    [2] => 9
    [3] => 13
    [4] => 18
    [5] => 24
    [6] => 31
)
```

b) 2, 2, 3, 3, 4, ?, ?

```
File Edit Selection Find View Goto Tools Project Preferences Help
index.php | pemakaian variabel.html | soal_a.php | soal_b.php | soal_c.php
C:\xampp1\htdocs\praktikum_p1\soal_b.php
1 <?php
2 $soal = [2,2,3,3,4];
3 function seq_b($deret_awal, $tambahan = 2) {
4     $hasil = $deret_awal;
5     for ($i = 0; $i < $tambahan; $i++) {
6         $last = $hasil[count($hasil)-1];
7         $count_repeat = 0;
8         for ($j = count($hasil)-1; $j >= 0; $j--) {
9             if($hasil[$j] == $last) $count_repeat++;
10            else break;
11        }
12        if ($count_repeat < 2) {
13            $hasil[] = $last;
14        } else {
15            $hasil[] = $last + 1;
16        }
17    }
18    return $hasil;
19 }
20 $jawab = seq_b($soal, 2);
21 echo "deret awal : " . implode(",",$soal) . "<br>";
22 echo "hasil lengkap : " . implode(",",$jawab) . "<br>";
23 echo "dua angka berikutnya : " .
24 $jawab[count($jawab)-2] . ", " . $jawab[count($jawab)-1];
25 ??
26
```

← → ↻ ⓘ localhost/praktikum_p1/soal_b.php

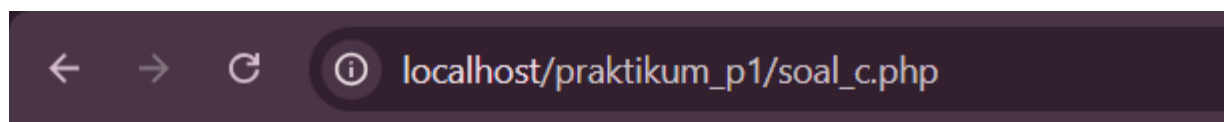
deret awal : 2,2,3,3,4

hasil lengkap : 2,2,3,3,4,4,5

dua angka berikutnya : 4, 5

c) 1, 9, 2, 10, 3, ?, ?

```
File Edit Selection Find View Goto Tools Project Preferences Help
index.php | pemetaan variabel.html | soal_a.php | soal_b.php | soal_c.php
1 <?php
2 $soal = [1,9,2,10,3];
3 function seq_c($deret_awal, $deret_berikutnya = 2) {
4     $hasil = $deret_awal;
5     for ($i = 0; $i < $deret_berikutnya; $i++) {
6         $posisi = count($hasil) + 1;
7         if ($posisi % 2 == 1){
8             $count_odd = 0;
9             for ($j = 0; $j < count($hasil); $j++) {
10                 if (($j+1) % 2 == 1) $count_odd++;
11             }
12             $hasil[] = $count_odd + 1; } else {
13             $count_even = 0;
14             for ($j = 0; $j < count($hasil); $j++) {
15                 if (($j+1) % 2 == 0) $count_even++;
16             }
17             $hasil[] = 9 + $count_even;
18         }
19     }
20     return $hasil;
21 }
22 $jawab = seq_c($soal, 2);
23 echo "deret_awal: " . implode(", ", $soal) . "<br>";
24 echo "hasil lengkap: " . implode(", ", $jawab) . "<br>";
25 echo "dua angka berikutnya: " . $jawab[count($jawab)-2] . "," . $jawab[count($jawab)-1];
26
27 ?>
```



deret_awal: 1, 9, 2, 10, 3
hasil lengkap: 1, 9, 2, 10, 3, 11, 4
dua angka berikutnya: 11,4

BAB III

KESIMPULAN

3.1 Kesimpulan

PHP merupakan salah satu Bahasa pemrograman web yang paling populer hingga saat ini. Dengan sifatnya yang open-source, mudah dipelajari, serta dukungan komunitas luas, PHP banyak digunakan dalam pembuatan website dinamis, sistem informasi, hingga aplikasi berbasis web modern.