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Kelas: 2B

MATKUL: Algoritma dan Struktur Data 2

## Tugas 1 Pergayaan Array dan looping.

### a) 1. Nested loop

\* Deklarasi Package:

Package Nested looping;

\* Import library:

Tidak ada library yang diimport

\* Bagian class:

```
Public class no2 {  
    Public static void main (String[] args) {  
        Int x, y;  
        For (x=0; x <= 4; x++) {  
            For (y=0; y < x; y++) {  
                System.out.println(x);  
            }  
            System.out.println();  
        }  
    }  
}
```

\* Method main:

```
Public static void main (String[] args) {  
    Int x, y;  
    For (x=0; x <= 4; x++) {  
        For (y=0; y < x; y++) {  
            System.out.println(x);  
        }  
        System.out.println();  
    }  
}
```

\* Document Section:

Tidak ada Documentation section di class ini.

2. Array menggunakan looping.

\* Deklarasi Package:

Tidak ada package

\* Import library:

Tidak ada library yang diimport

\* Bagian class:

```
Public class array Perulangan_3 {  
    Public static void main (String [] args) {
```

```
        String [] siswa = { "Reinan", "Odena", "Geano" }; // Panjang array
```

```
        For (int i=0; i < siswa.length; i++) {  
            System.out.println ("Indeks ke "+ i + " = " + siswa[i]);  
        }  
    }  
}
```

\* Method main: ~~@@~~ -

```
Public static void main (String args []) {
```

```
    String [] siswa = { "Reinan", "Odena", "Geano" }; // Panjang Array
```

```
    For (int i=0; i < siswa.length; i++) {  
        System.out.println ("Indeks ke "+ i + " = " + siswa[i]);  
    }  
}
```

\* Documentation Section:

// Panjang array

## b) 1. Nested looping

No	Penjelasan	Output
1.	$x = 0; 0 < 4 \rightarrow T$ , lanjut looping dalam	
2.	$y = 0; 0 < 0 \rightarrow F$ , stop looping dalam	
3.	<code>Println()</code>	Enter baris
4.	$x++ = x = 0 + 1 = 1; 1 < 4 \rightarrow T$ , lanjut looping dalam	
5.	$y = 0; 0 < 1 \rightarrow T$ , <code>Print 1 (x)</code>	1
6.	$y++ = y = 0 + 1 = 1; 1 < 1 \rightarrow F$ , stop looping dalam	
7.	<code>Println()</code>	Enter baris
8.	$x++$ , $x = 1 + 1 = 2; 2 < 4 \rightarrow T$ , lanjut looping dalam	
9.	$y = 0; 0 < 2 \rightarrow T$ True, <code>Print 2 (x)</code>	2
10.	$y++ = y = 0 + 1 = 1; 1 < 2 \rightarrow T$ , <code>Print 2 (x)</code>	2 2
11.	$y++ = y = 1 + 1 = 2; 2 < 2 \rightarrow F$ , stop looping dalam	
12.	<code>Println()</code>	Enter baris
13.	$x++ = x = 2 + 1 = 3; 3 < 4 \rightarrow T$ , lanjut looping dalam	
14.	$y = 0; 0 < 3 \rightarrow T$ , <code>Print 3 (x)</code>	3
15.	$y++ = 0 + 1 = 1; 1 < 3 \rightarrow T$ , <code>Print 3 (x)</code>	3 3
16.	$y++ = 1 + 1 = 2; 2 < 3 \rightarrow T$ , <code>Print 3 (x)</code>	3 3 3
17.	$y++ = y = 2 + 1 = 3; 3 < 3 \rightarrow F$ , stop looping dalam	
18.	<code>Println()</code>	Enter baris
19.	$x++ = x = 3 + 1 = 4; 4 < 4 \rightarrow F$ False, lanjut looping	
20.	$y = 0; 0 < 4 \rightarrow T$ , <code>Print 4 (x)</code>	4
21.	$y++ = 0 + 1 = 1; 1 < 4 \rightarrow T$ , <code>Print 4 (x)</code>	4 4
22.	$y++ = 1 + 1 = 2; 2 < 4 \rightarrow T$ , <code>Print 4 (x)</code>	4 4 4
23.	$y++ = 2 + 1 = 3; 3 < 4 \rightarrow T$ , <code>Print 4 (x)</code>	4 4 4 4
24.	$y++ = 3 + 1 = 4; 4 < 4 \rightarrow F$ , False maka stop looping	
25.	<code>Println()</code>	Enter baris
	$x++ = 4 + 1 = 5; 5 < 4 \rightarrow F$ , program berhenti	



## 2. Array menggunakan looping

No.	Penjelasan	Output
1.	$i = 0, 0 < \text{siswa.length}$ ( $\text{siswa.length} = \text{banyaknya data array}$ )	
2.	$i = 0, 0 < 3 \rightarrow T$ $\text{Println}(\text{"Indeks ke } 0 \text{ + " + siswa[0]})$	Rernan
3.	$i++ = 0+1 = 1; 1 < 3 \rightarrow T$ $\text{Println}(\text{"Indeks ke } 1 \text{ + " + siswa[1]})$	Denda
4.	$i++ = 1+1 = 2; 2 < 3 \rightarrow T$ $\text{Println}(\text{"Indeks ke } 2 \text{ + " + siswa[2]})$	Geranno
5.	$i++ = 2+1 = 3; 3 < 3 \rightarrow F$ , Program berhenti	