

## Tugas 1

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Kelas / Prodi : 2C / DIV TI

Makul : Algoritma dan Struktur Data 2

### (a) 1. Nested Loop

- Deklarasi package  
`package Nested Looping;`
- Import Library  
-
- Bagian class  
`public class no2 {`
- Method main  
`public static void main(String[] args) {`
- Documentation Section  
-

### 2. Array menggunakan looping

- Deklarasi package  
-
- Import Library  
-
- Bagian class  
`public class arrayPerulangan_3 {`
- Method main  
`public static void main(String args[]) {`
- Documentation section  
`String[] siswa = {"Reinan", "Odera", "Geanmo"};`

6. 1. Nested Loop

• Perulangan bersarang / Nested Loop

Code	Output
package Nested Looping;	1
public class no2 {	22
public static void main(String[] args) {	333
int x, y;	4444
for (x = 0; x <= 4; x++) {	
for (y = 0; y < x; y++) {	
System.out.print(x);	
y	
System.out.println ( );	
}	
}	
}	

• Penjelasan jalannya Program

No.	Code	Out put
1.	$x = 0$ ; $0 \leq 4 \rightarrow T$ ; lanjut ke looping dalam	
2.	$y = 0$ ; $0 < 0 \rightarrow F$ ; stop	
3.	print ( )	
4.	$x++$ ; $x = 0 + 1 = 1$ ; $1 \leq 4 \rightarrow T$ ; lanjut ke looping dalam	
5.	$y = 0$ ; $0 < 1 \rightarrow T$ ; print 1	1
6.	$y++$ ; $y = 0 + 1 = 1$ ; $1 < 1 \rightarrow F$ ; stop	
7.	print ( )	Enter baris
8.	$x++$ ; $x = 1 + 1 = 2$ ; $2 \leq 4 \rightarrow T$ ; lanjut ke looping dalam	
9.	$y = 0$ ; $0 < 2 \rightarrow T$ ; print 2	2
10.	$y++$ ; $y = 0 + 1 = 1$ ; $1 < 2 \rightarrow T$ ; print 2	22
11.	$y++$ ; $y = 1 + 1 = 2$ ; $2 < 2 \rightarrow F$ ; stop	
12.	print ( )	Enter baris
13.	$x++$ ; $x = 2 + 1 = 3$ ; $3 \leq 4 \rightarrow T$ ; lanjut ke looping dalam	
14.	$y = 0$ ; $0 < 3 \rightarrow T$ ; print 3	3
15.	$y++$ ; $y = 0 + 1 = 1$ ; $1 < 3 \rightarrow T$ ; print 3	33
16.	$y++$ ; $y = 1 + 1 = 2$ ; $2 < 3 \rightarrow T$ ; print 3	333
17.	$y++$ ; $y = 2 + 1 = 3$ ; $3 < 3 \rightarrow F$ ; stop	
18.	print ( )	Enter baris
19.	$x++$ ; $x = 3 + 1 = 4$ ; $4 \leq 4 \rightarrow T$ ; lanjut ke looping dalam	



20.	$y=0; 0 < 4 \rightarrow T; \text{print } 4$	4
21.	$y++; y = 0+1 = 1; 1 < 4 \rightarrow T; \text{print } 4$	44
22.	$y++; y = 1+1 = 2; 2 < 4 \rightarrow T; \text{print } 4$	444
23.	$y++; y = 2+1 = 3; 3 < 4 \rightarrow T; \text{print } 4$	4444
24.	$y++; y = 3+1 = 4; 4 < 4 \rightarrow F; \text{stop}$	

## 2. Array menggunakan looping

Code	output
<pre> public class arrayPerulangan_3 {     public static void main (String args[]) {          String[] siswa = {"Reinan", "Odena", "Gearmo"};          for (int i=0; i &lt; siswa.length; i++) {             System.out.println("Indeks ke " + i + " = " + mahasiswa[i]);         }     } } </pre>	<p>Indeks ke 0 = Reinan</p> <p>Indeks ke 1 = Odena</p> <p>Indeks ke 2 = Gearmo</p>

### • Penjelasan Jabannya Program

No	Code	output
1.	$i=0; 0 < 3 \rightarrow T; \text{print "Indeks ke " + 0 + " = " + mahasiswa[0]}$	Indeks ke 0 = Reinan
2.	$i++; i = 0+1 = 1; 1 < 3 \rightarrow T; \text{print "Indeks ke " + 1 + " = " + mahasiswa[1]}$	Indeks ke 1 = Odena
3.	$i++; i = 1+1 = 2; 2 < 3 \rightarrow T; \text{print "Indeks ke " + 2 + " = " + mahasiswa[2]}$	Indeks ke 2 = Gearmo
4.	$i++; i = 2+1 = 3; 3 < 3 \rightarrow F; \text{stop}$	