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Mata Kuliah : Algoritma dan Struktur data 2

#### A. 1. Nested loop

- Deklarasi Package : Package Nested looping
- Import library : Tidak ada
- Bagian class : Public class no 2 {
- Method main : Public static void main (String [] args) {
- Documentation section : Tidak ada

#### 2. Array menggunakan looping

- Deklarasi Package : Tidak ada
- Import library : Tidak ada
- Bagian class : Public class array Perulangan 3 {
- Method main : Public static void main (String args []) {
- Documentation section : // Panjang array 3

#### B. 1. Nested Loop

Package Nested looping :

```
Public class no 2 {  
    Public static void main (String [] args) {  
        Int x, y;  
        For (x = 0 ; x <= 4 : x++) {  
            For (y = 0 ; y < x : y++) {  
                System.out.print (x);  
            }  
            System.out.println ();  
        }  
    }  
}
```

Penjelasan

x = 0 ; x <= 4 → True , maka lanjut looping dalam  
y = 0 ; 0 < 0 → false , maka stop looping dalam  
Print ()

out Put

Enter basis

$x++$  ;  $x = 0 + 1 = 1$  ;  $x = 0 \leq 4 \rightarrow \text{True}$  , lanjut looping dalam

$y = 0$  ;  $0 < 1 \rightarrow \text{True}$  , print x

1

$y++$  :  $y = 0 + 1 = 1$  ;  $1 < 1 \rightarrow \text{false}$  , stop looping dalam

Print ( )

$x++$  :  $x = 1 + 1 = 2$  ;  $2 \leq 4 \rightarrow \text{True}$  , lanjut looping dalam

$y = 0$  ;  $0 < 2 \rightarrow \text{True}$  , print x

2

$y++$  :  $y = 0 + 1 = 1$  ;  $1 < 2 \rightarrow \text{True}$  , print x

22

$y++$  :  $y = 1 + 1 = 2$  ;  $2 < 2 \rightarrow \text{False}$  , stop looping dalam

Print ( )

Enter baris

$x++$  ;  $x = 2 + 1 = 3$  ;  $3 \leq 4 \rightarrow \text{True}$  lanjut looping dalam

$y = 0$  ;  $0 < 3 \rightarrow \text{True}$  , print x

3

$y++$  :  $y = 0 + 1 = 1$  ;  $1 < 3 \rightarrow \text{True}$  , print x

33

$y++$  :  $y = 1 + 1 = 2$  ;  $2 < 3 \rightarrow \text{True}$  , print x

333

$y++$  ;  $y = 2 + 1 = 3$  ;  $3 < 3 \rightarrow \text{false}$  stop looping dalam

Print ( )

$x++$  ;  $x = 3 + 1 = 4$  ;  $4 \leq 4 \rightarrow \text{True}$  lanjut looping dalam

$y = 0$  ;  $0 < 4 \rightarrow \text{True}$  , print x

4

$y++$  :  $y = 0 + 1 = 1$  ;  $1 < 4 \rightarrow \text{True}$  , print x

44

$y++$  :  $y = 1 + 1 = 2$  ;  $2 < 4 \rightarrow \text{True}$  , print x

444

$y++$  :  $y = 2 + 1 = 3$  ;  $3 < 4 \rightarrow \text{True}$  , print x

4444

$y++$  :  $y = 3 + 1 = 4$  ;  $4 < 4 \rightarrow \text{false}$  stop looping dalam

Print ( )

Enter baris

$x++$  ;  $x = 4 + 1 = 5$  ;  $5 \leq 4 \rightarrow \text{false}$  , stop looping dalam

Print ( )

End

Hasil = 1

22

333

4444

2. Array menggunakan looping

```
public class array Perulangan - 3 {
```

```
    String [] siswa = {"Reinan", "Odena", "Geanno"}; // Panjang array 3
```

```
    for (int i=0; i<siswa.length; i++) {
```

```
        System.out.println ("Indeks ke " + i + " = " + mahasiswa [i]);
```

```
    }
```

```
}
```

```
}
```

Penjelasan

Siswa.length adalah Panjang / banyaknya data siswa dalam array

$i = 0 ; 0 < 3 \rightarrow \text{True}$

`Println ("Indeks ke " + i + " = " + siswa [i])`

0 = Reinan

$i++ ; i = 0 + 1 = 1 : 1 < 3 \rightarrow \text{True}$

`Println ("Indeks ke " + i + " = " + siswa [i])`

1 = Odena

$i++ ; i = 1 + 1 = 2 : 2 < 3 \rightarrow \text{True}$

`Println ("Indeks ke " + i + " = " + siswa [i])`

2 = Geanno

$i++ ; i = 2 + 1 = 3 : 3 < 3 \rightarrow \text{false}$  . Program selesai.