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Kelas : 2B

Tugas 1 (Pengayuan Looping & Array)

a. Pada masing-masing kode program dibawah ini (Nested looping & Array), sebutkan mana yang merupakan :

- < Deklarasi Package
- < Impor Library
- < Bagian Class
- < Method Main
- < Documentation Section

① Nested Loop

Package Nested looping; → Deklarasi Package

Public class no2 { → Bagian Class

 Public static void main(String[] args) { → Method Main

 int x, y;

 for (x=0; x <= 4; x++) {

 for (y=0; y < x; y++) {

 System.out.print (x);

 }

 System.out.println ();

 }

 }

Penjelasan :

- < Deklarasi Package → Ada (package Nested looping;)
- < Impor Library → Tidak ada
- < Bagian Class → Ada (public class no2 {)
- < Method Main → Ada (public static void main(String[] args) {)
- < Documentation Section → Tidak ada

② Array menggunakan looping

public class arrayPerulangan_3 { → Bagian class
 public static void main (String args[]) { → Method Main

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

 Documentation
 Section

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

}

}

}

Penjelasan :

- < Deklarasi Package → Tidak Ada
- < Impor Library → Tidak Ada
- < Bagian Class → Ada (public class arrayPerulangan_3 {)
- < Method Main → Ada (public static void main (String args[])) {
- < Documentation Section → Ada (//panjang array 3)

b. Berilah penjelasan mengenai jalannya kode program dibawah ini :

① Nested loop

package NestedLooping;

public class no2 {

 public static void main (String [] args) {

 int x,y ;

 for (x=0; x <=9; x++) {

 for (y=0; y < x; y++) {

 System.out.print (x);

}

 System.out.println ();

}

}

}

Penjelasan

Output

NO		
1.	$x = 0; x <= 4 ?$ True \rightarrow lanjut looping dalam	
2.	$y = 0; 0 < 0 ?$ False \rightarrow Stop looping dalam	Enter Baris
	print()	
3.	$x++; x = 0 + 1 = 1; x = 0 <= 4 ?$ True \rightarrow lanjut looping dalam	
4.	$y = 0; 0 < 1 ?$ True \rightarrow print x	1
5.	$y++; y = 0 + 1 = 1; 1 < 1 ?$ False \rightarrow Stop looping dalam	
	print()	
6.	$x++; x = 1 + 1 = 2; 2 <= 4 ?$ True \rightarrow lanjut looping dalam	
7.	$y = 0; 0 < 2 ?$ True \rightarrow print x	2
8.	$y++; y = 0 + 1 = 1; 1 < 2 ?$ True \rightarrow print x	22
9.	$y++; y = 1 + 1 = 2; 2 < 2 ?$ False \rightarrow Stop looping dalam	
	print()	Enter Baris
10.	$x++; x = 2 + 1 = 3; 3 <= 4 ?$ True \rightarrow lanjut looping dalam	
11.	$y = 0; 0 < 3 ?$ True \rightarrow print x	3
12.	$y++; y = 0 + 1 = 1; 1 < 3 ?$ True \rightarrow print x	33
13.	$y++; y = 1 + 1 = 2; 2 < 3 ?$ True \rightarrow print x	333
14.	$y++; y = 2 + 1 = 3; 3 < 3 ?$ False \rightarrow Stop looping dalam	
	print()	
15.	$x++; x = 3 + 1 = 4; 4 <= 4 ?$ True \rightarrow lanjut looping dalam	
16.	$y = 0; 0 < 4 ?$ True \rightarrow print x	4
17.	$y++; y = 0 + 1 = 1; 1 < 4 ?$ True \rightarrow print x	44
18.	$y++; y = 1 + 1 = 2; 2 < 4 ?$ True \rightarrow print x	444
19.	$y++; y = 2 + 1 = 3; 3 < 4 ?$ True \rightarrow print x	4444
20.	$y++; y = 3 + 1 = 4; 4 < 4 ?$ False \rightarrow Stop looping dalam	
	print()	Enter Baris
21.	$x++; x = 4 + 1 = 5; 5 <= 4 ?$ False \rightarrow Stop looping dalam	
	print()	
	end,	
	Hasil :	1
		22
		333
		4444

② Array Menggunakan Looping

```
public class ArrayPerulangan_3 {  
    public static void main (String args[]) {  
        String [] Siswa = {"Reinon", "Odena", "Geanno"}; //panjang array 3
```

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

NO	Penjelasan → Siswa.length = 3	Output
1.	i=0 0 < 3 ? True → print "Indeks ke " + i + "=" + mahasiswa [i]	Reinan
2.	i++; i=0+1=1; 1 < 3 ? True → print "Indeks ke " + i + "=" + mahasiswa [i]	Odena
3.	i++; i= 1+1=2; 2 < 3 ? True → print "Indeks ke " + i + "=" + mahasiswa [i]	Geanno
4	i++; i= 2+1=3; 3 < 3 ? False → Stop array looping	