### Sesi 1

#### Looping

Looping adalah struktur kontrol yang memungkinkan Anda untuk mengulangi tugas beberapa kali. Mungkin ada situasi ketika kita perlu mengeksekusi blok kode beberapa kali, dan sering disebut sebagai looping. Java memiliki tiga mekanisme perulangan. Anda dapat menggunakan salah satu dari tiga perulangan berikut:

### 1. while

#### Syntax:

while(Boolean\_expression)  
{  
 //Statements  
}

#### Contoh:

public class Test {  
  
 public static void main(String args[]) {  
 int x = 10;  
  
 while( x < 20 ) {  
 System.out.print("value of x : " + x );  
 x++;  
 System.out.print("\n");  
 }  
 }  
}

#### Output:

value of x : 10  
value of x : 11  
value of x : 12  
value of x : 13  
value of x : 14  
value of x : 15  
value of x : 16  
value of x : 17  
value of x : 18  
value of x : 19

### 2. do ... while

#### Syntax:

do  
{  
 //Statements  
}while(Boolean\_expression);

#### Contoh:

public class Test {  
  
 public static void main(String args[]){  
 int x = 10;  
  
 do{  
 System.out.print("value of x : " + x );  
 x++;  
 System.out.print("\n");  
 }while( x < 20 );  
 }  
}

#### Output:

value of x : 10  
value of x : 11  
value of x : 12  
value of x : 13  
value of x : 14  
value of x : 15  
value of x : 16  
value of x : 17  
value of x : 18  
value of x : 19

### 3. for

#### Syntax:

for(initialization; Boolean\_expression; update)  
{  
 //Statements  
}

#### Contoh:

public class Test {  
  
 public static void main(String args[]) {  
  
 for(int x = 10; x < 20; x = x+1) {  
 System.out.print("value of x : " + x );  
 System.out.print("\n");  
 }  
 }  
}

#### Output:

value of x : 10  
value of x : 11  
value of x : 12  
value of x : 13  
value of x : 14  
value of x : 15  
value of x : 16  
value of x : 17  
value of x : 18  
value of x : 19

### Contoh for dalam bentuk lain

#### Syntax:

for(declaration : expression)  
{  
 //Statements  
}

#### Contoh:

public class Test {  
  
 public static void main(String args[]){  
 int [] numbers = {10, 20, 30, 40, 50};  
  
 for(int x : numbers ){  
 System.out.print( x );  
 System.out.print(",");  
 }  
 System.out.print("\n");  
 String [] names ={"James", "Larry", "Tom", "Lacy"};  
 for( String name : names ) {  
 System.out.print( name );  
 System.out.print(",");  
 }  
 }  
}

#### Output:

10,20,30,40,50,  
James,Larry,Tom,Lacy,

### Contoh for dengan break;

#### Syntax:

break;

#### Contoh:

public class Test {  
  
 public static void main(String args[]) {  
 int [] numbers = {10, 20, 30, 40, 50};  
  
 for(int x : numbers ) {  
 if( x == 30 ) {  
 break;  
 }  
 System.out.print( x );  
 System.out.print("\n");  
 }  
 }  
}

#### Output:

10  
20

### Contoh for dengan continue;

#### Syntax:

continue;

#### Contoh:

public class Test {  
  
 public static void main(String args[]) {  
 int [] numbers = {10, 20, 30, 40, 50};  
  
 for(int x : numbers ) {  
 if( x == 30 ) {  
 continue;  
 }  
 System.out.print( x );  
 System.out.print("\n");  
 }  
 }  
}

#### Output:

10  
20  
40  
50