

Java Loop Control & Decision Making

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while Loop in java

```
public class Test {  
  
    public static void main(String args[]) {  
        int x = 10;  
  
        while( x < 15 ) {  
            System.out.print("value_of_x:_ " + x );  
            x++;  
            System.out.print("\n" );  
        }  
    }  
}
```

When the above code is compiled and executed, it produces the following result:

```
value of x : 10  
value of x : 11  
value of x : 12  
value of x : 13  
value of x : 14
```

for Loop in java

```
public class Test {  
  
    public static void main(String args[]) {  
  
        for(int x = 10; x < 15; x = x + 1) {  
            System.out.println("value of x: " + x );  
        }  
    }  
}
```

When the above code is compiled and executed, it produces the following result:

```
value of x : 10  
value of x : 11  
value of x : 12  
value of x : 13  
value of x : 14
```

Enhanced for Loop in Java

```
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.println("");  
        String [] names = {"James", "Larry", "Tom", "Lacy"};  
        for( String name : names ) {  
            System.out.print( name );  
            System.out.print(",");  
        }  
    }  
}
```

When the above code is compiled and executed, it produces the following result:

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

do while Loop in java

```
public class Test {  
  
    public static void main(String args[]) {  
        int x = 10;  
  
        do {  
            System.out.println("value of x: " + x );  
            x++;  
        } while( x < 15 );  
    }  
}
```

When the above code is compiled and executed, it produces the following result:

```
value of x : 10  
value of x : 11  
value of x : 12  
value of x : 13  
value of x : 14
```

Break statement in java

```
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" );  
        }  
    }  
}
```

When the above code is compiled and executed, it produces the following result:

```
| 10  
| 20
```

Continue statement in java

```
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");  
        }  
    }  
}
```

When the above code is compiled and executed, it produces the following result:

```
10  
20  
40  
50
```

switch statement in java: Part I

```
public class Test {  
public class Test {  
    public static void main(String args[]) {  
        char grade = 'A';  
        switch(grade) {  
            case 'A' :  
                System.out.println("Excellent!");  
                break;  
            case 'B' :  
            case 'C' :  
                System.out.println("Well_done");  
                break;  
            case 'D' :  
                System.out.println("You_passed");  
            case 'F' :  
                System.out.println("Better_try_again");  
                break;  
            default :  
                System.out.println("Invalid_grade");  
        }  
    }  
}
```


switch statement in java: Part II

```
    }  
    System.out.println("Your_grade_is_" + grade);  
  }  
}
```

When the above code is compiled and executed, it produces the following result:

```
| Excellent!  
| Your grade is A
```

Ternary Conditional Operator in java: Part I

```
package ewu.cse;
public class TernaryConditionalOperator {
    public static void main(String[] args) {
        int num = 8;
        String msg = "";
        if(num > 10) {
            msg = "Number_is_greater_than_10";
        }
        else {
            msg = "Number_is_less_than_or_equal_to_10";
        }
        System.out.println(""+msg);

        msg = num > 10
            ? "Number_is_greater_than_10"
            : "Number_is_less_than_or_equal_to_10";
        System.out.println(""+msg);
    }
}
```

Ternary Conditional Operator in java: Part II

When the above code is compiled and executed, it produces the following result:

```
| Number is less than or equal to 10  
| Number is less than or equal to 10
```

References



DEITEL, Java How to Program, 11/e



Java: the complete reference, Herbert Schildt, McGraw-Hill Education Group