

## Java Variable Example: Add Two Numbers

```
public class Simple{
public static void main(String[] args){
int a=10;
int b=10;
int c=a+b;
System.out.println(c);
}
}
```

## Java Variable Example: Widening

```
public class Simple{
public static void main(String[] args){
int a=10;
float f=a;
System.out.println(a);
System.out.println(f);
}}
```

## Java Unary Operator Example: ++ and --

```
public class OperatorExample{
public static void main(String args[]){
int x=10;
System.out.println(x++); //10 (11)
System.out.println(++x); //12
System.out.println(x--); //12 (11)
System.out.println(--x); //10
}}
```

## 1012 Java Arithmetic Operator Example

```
public class OperatorExample{
public static void main(String args[]){
int a=10;
int b=5;
System.out.println(a+b); //15
System.out.println(a-b); //5
System.out.println(a*b); //50
System.out.println(a/b); //2
System.out.println(a%b); //0
}}
```

## Java Arithmetic Operator Example: Expression

```
public class OperatorExample{  
public static void main(String args[]){  
System.out.println(10*10/5+3-1*4/2);  
}}
```

## Java Left Shift Operator Example

```
public class OperatorExample{  
public static void main(String args[]){  
System.out.println(10<<2);//10*2^2=10*4=40  
System.out.println(10<<3);//10*2^3=10*8=80  
System.out.println(20<<2);//20*2^2=20*4=80  
System.out.println(15<<4);//15*2^4=15*16=240  
}}
```

## Java Right Shift Operator Example

```
public class OperatorExample{  
public static void main(String args[]){  
System.out.println(10>>2);//10/2^2=10/4=2  
System.out.println(20>>2);//20/2^2=20/4=5  
System.out.println(20>>3);//20/2^3=20/8=2  
}}
```

## Java AND Operator Example: Logical && and Bitwise &

```
public class OperatorExample{  
public static void main(String args[]){  
int a=10;  
int b=5;  
int c=20;  
System.out.println(a<b&&a<c);//false && true = false  
System.out.println(a<b&a<c);//false & true = false  
}}
```

## Java OR Operator Example: Logical || and Bitwise |

```
public class OperatorExample{
    public static void main(String args[]){
        int a=10;
        int b=5;
        int c=20;
        System.out.println(a>b||a<c);//true || true = true
        System.out.println(a>b|a<c);//true | true = true
        //|| vs |
        System.out.println(a>b||a++<c);//true || true = true
        System.out.println(a);//10 because second condition is not checked
        System.out.println(a>b|a++<c);//true | true = true
        System.out.println(a);//11 because second condition is checked
    }
}
```

## Java Ternary Operator Example

```
public class OperatorExample{
    public static void main(String args[]){
        int a=2;
        int b=5;
        int min=(a<b)?a:b;
        System.out.println(min);
    }
}
```

## Java Assignment Operator Example

```
public class OperatorExample{
    public static void main(String args[]){
        int a=10;
        int b=20;
        a+=4;//a=a+4 (a=10+4)
        b-=4;//b=b-4 (b=20-4)
        System.out.println(a);
        System.out.println(b);
    }
}
```

