

```
int a = 10;
int b = 3;
int c = 5;

// Using the + (addition) operator

int sum = a + b + c;

System.out.println("The sum is: " + sum);

// Using the - (subtraction) operator

int diff = a - b;

System.out.println("The difference is: " + diff);

// Arithmetic operators on integers(算術運算子在整數)

System.out.println("a + b = " + (a + b));
System.out.println("a - b = " + (a - b));
System.out.println("a * b = " + (a * b));
System.out.println("a / b = " + (a / b));
System.out.println("a % b = " + (a % b));

// Relational operators(關聯式運算子)

System.out.println("a > b : " + (a > b));
System.out.println("a < b : " + (a < b));
System.out.println("a >= b : " + (a >= b));
System.out.println("a <= b : " + (a <= b));
System.out.println("a == c : " + (a == c));
System.out.println("a != c : " + (a != c));

// Unary Operators(一元運算子)

int i = 10;
int j = 10;
int k = i++; // Post-Increment: Uses value first, then increments.(事後遞增: 取值先, 然後遞增)
int l = j--; // Post-Decrement: Uses value first, then decrements.(事後遞減: 取值先, 然後遞減)
int m = 10;
```

```
int n = 10;  
int o = ++m; // Pre-Increment: Increments first, then uses value.(預先遞增: 遞增先, 然後取值)  
int p = --n; // Pre-Decrement: Decrements first, then uses value.(預先遞減: 遞減先, 然後取值)
```

```
System.out.println("i : " + i);  
System.out.println("j : " + j);  
System.out.println("k : " + k);  
System.out.println("l : " + l);  
System.out.println("m : " + m);  
System.out.println("n : " + n);  
System.out.println("o : " + o);  
System.out.println("p : " + p);
```

```
// Logical operators(邏輯運算子)
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```
int number = 75;
```

```
System.out.println("(number > 70 && number < 80) : " + (number > 70 && number < 80));  
System.out.println("(number > 80 || number < 75) : " + (number > 80 || number < 75));  
System.out.println("!(number > 80 || number < 75): " + !(number > 80 || number < 75));
```

```
boolean x = true;  
boolean y = false;
```

```
System.out.println("(x && y) : " + (x && y));  
System.out.println("(x || y) : " + (x || y));  
System.out.println("(!x) : " + (!x));
```

```
// Do NOT copy the following command lines to HelloWorld.java
```

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// Bitwise operators(位元運算子)
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```
System.out.println("(number > 70 & number < 80) : " + (number > 70 & number < 80));  
System.out.println("(number > 80 | number < 75) : " + (number > 80 | number < 75));  
System.out.println("!(number > 80 | number < 75): " + !(number > 80 | number < 75));
```