

Key point: *The increment operator (++) and decrement operator (--) are for incrementing and decrementing a variable by 1.*

- Post increment and post decrement

```
int i = 3, j = 3;
i++;           //i becomes 4
j--;           //j becomes 2

int k = i++;    //is equivalent to
int k = i;
i = i + 1;      //For example, if i=3, then k=3 after which i is incremented to 4.
```

- Pre-increment and pre-decrement

```
int i = 3, j = 3;
++i;           //i becomes 4
--j;           //j becomes 2

int k=++i;      //is equivalent to
i = i + 1;
int k = i;       //For example, if i=3, then i is incremented to 4 and assigned to k,
                //making k=4.
```

Table 2.5 Increment and Decrement Operators

Operator	Name	Description	Example (assume i=1)
++var	preincrement	Increment var by 1 , and use the new var value in the statement	int j = ++i; //j is 2, i is 2
var++	postincrement	Increment var by 1 , but use the original var value in the statement	int j = i++; //j is 1, i is 2
--var	predecrement	Decrement var by 1 , and use the new var value in the statement	int j = --i; //j is 0, i is 0
var--	postdecrement	Decrement var by 1 , but use the original var value in the statement	int j = i-- //j is 1, i is 0

```
int i = 10;  
int newNum = 10 * (++i);      //Equivalent to i = i + 1; int newNum = 10 * i;  
System.out.print("i is " + i + ", newNum is " + newNum);
```

i is 11, newNum is 100

```
int i = 10;  
int newNum = 10 * (++i);      //Equivalent to int newNum = 10 * i; i = i + 1;  
System.out.print("i is " + i + ", newNum is " + newNum);
```

i is 11, newNum is 110