

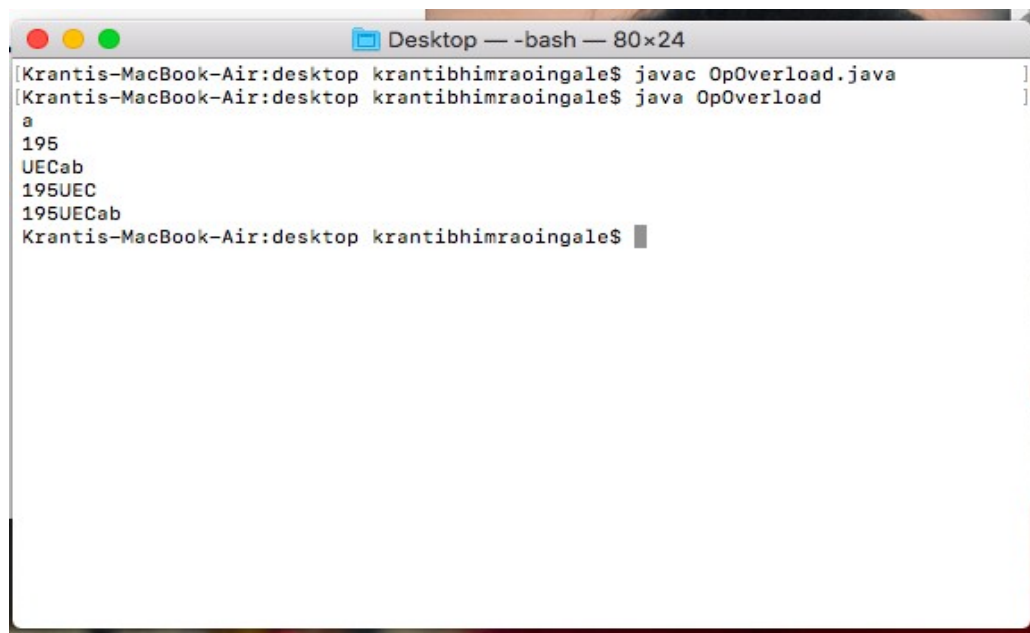
Operator Overloading

- 1) One operator with more than one behaviour is called **Operator Overloading**.
- 2) CPP supports operator overloading but java does not.
- 3) One overloaded operator is there in java i.e + (Plus Operator)
- 4) When you add a non string operand such as an integer or char to a String, the non-string operand is converted to a string and string concatenation happens.
- 4) If both operands are char literals, the + operator performs addition rather than string concatenation by promoting each of the char-valued operands to int values.

Ex:-Operator Overloading

```
class OpOverload
{
public static void main(String args[]) {
    System.out.println('a');
    System.out.println('a' + 'b');
    System.out.println("UEC" + 'a' + 'b');
    System.out.println('a' + 'b'+"UEC");
    System.out.println('a' + 'b'+"UEC" + 'a' + 'b');
}
}
```

Output



```
Desktop — -bash — 80x24
[Krantis-MacBook-Air:desktop krantibhimraoingale$ javac OpOverload.java
[Krantis-MacBook-Air:desktop krantibhimraoingale$ java OpOverload
a
195
UECab
195UEC
195UECab
Krantis-MacBook-Air:desktop krantibhimraoingale$
```

Line 1: `System.out.println('a');`

`System.out.println()` is overloaded for character and it prints the character it represents

Line 2 : `System.out.println('a' + 'b');`

Here both operands are char literals. the + operator performs addition rather than string concatenation. the expression 'a' + 'b' is equivalent to the int constant 97 + 98, or 195.

Line 3: `System.out.println("UEC" + 'a' + 'b');`

When you add a String to an integer or char it is converted to a string and hence string concatenation happens. So output is UECab.

Line 4: `System.out.println('a' + 'b'+"UEC");`

Java evaluates operands from left.

So it adds 'a' and 'b' as string literals and then concatenates the result to the string "UEC" to get 195UEC.

Line 5: `System.out.println('a' + 'b'+"UEC" + 'a' + 'b');`

Java evaluates operands from left. So it adds 'a' and 'b' as char literals and then concatenates the result to the string "UEC" to get 195UEC.

Now this string 195UEC is added to 'a' and 'b', which will be string concatenation to get 195UECab.