

# SHA-1

## 使用JCA SHA-1

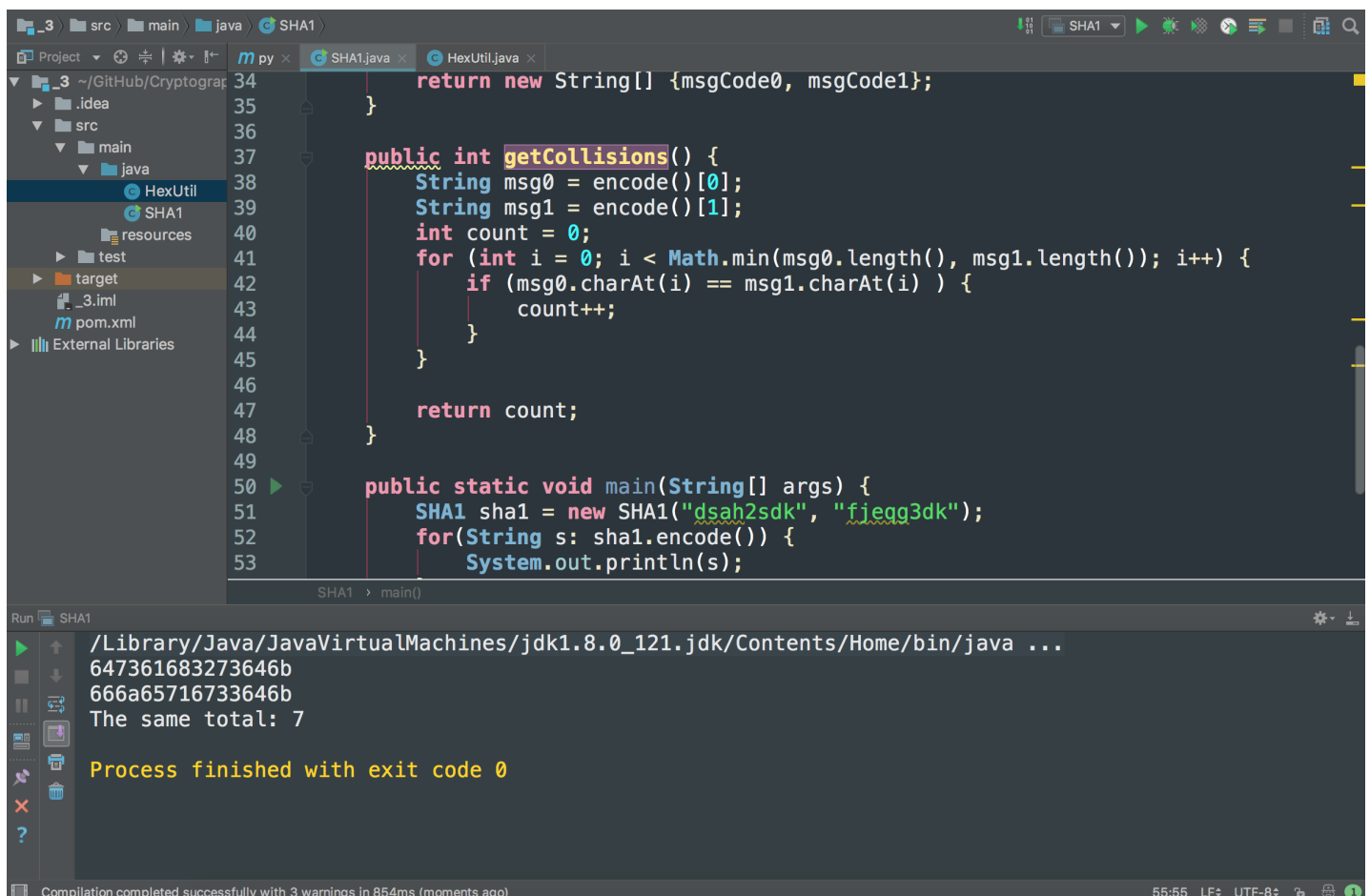
### 运行SHA1.java

a = "dsah2sdk", b = "fjeqq3dk"

Hash(a) = 647361683273646b

Hash(b) = 666a65716733646b

The same total: 7



The screenshot shows an IDE with a project named 'SHA1'. The code in SHA1.java defines a class with a `getCollisions()` method and a `main()` method. The `main()` method creates a `SHA1` object with the strings "dsah2sdk" and "fjeqq3dk", encodes them, and prints each character of the resulting byte arrays. The `getCollisions()` method counts the number of matching characters between the two byte arrays. The output window shows the execution results: the SHA1 hashes for each string and the total count of matching characters, which is 7.

```
34 return new String[] {msgCode0, msgCode1};
35 }
36
37 public int getCollisions() {
38     String msg0 = encode()[0];
39     String msg1 = encode()[1];
40     int count = 0;
41     for (int i = 0; i < Math.min(msg0.length(), msg1.length()); i++) {
42         if (msg0.charAt(i) == msg1.charAt(i) ) {
43             count++;
44         }
45     }
46
47     return count;
48 }
49
50 public static void main(String[] args) {
51     SHA1 sha1 = new SHA1("dsah2sdk", "fjeqq3dk");
52     for(String s: sha1.encode()) {
53         System.out.println(s);
54     }
55 }
```

Run SHA1

```
/Library/Java/JavaVirtualMachines/jdk1.8.0_121.jdk/Contents/Home/bin/java ...
647361683273646b
666a65716733646b
The same total: 7

Process finished with exit code 0
```