

```
1  import static java.lang.System.*;
2  import java.util.Arrays;
3
4  public class Fibonacci {
5      long[] sequence;
6
7      public Fibonacci() {
8      }
9
10     public void createSequence(int length) {
11         sequence = new long[length];
12
13         sequence[0] = 1;
14         sequence[1] = 1;
15
16         for(int i = 2; i < length; i++){
17             sequence[i] = ( sequence[i - 2] + sequence[i - 1] );
18         }
19     }
20
21     public String getNumAtLocation( int location ) {
22         int response = (int)sequence[location];
23         return( "This is the number: " + response );
24     }
25
26     public String getRangeOfNumbers( int start, int end ) {
27         long[] response = new long[ end - start ];
28
29         for(int i = 0; i < response.length; i++){
30             response[i] = sequence[start];
31             start++;
32         }
33
34         return( "Here is your subset of the Fibonacci sequence: " + Arrays.toString(
35             response ) );
36     }
```