

```

1  import static java.lang.System.*;
2  import java.util.ArrayList;
3  import java.util.List;
4  import java.util.Arrays;
5
6  public class Factors {
7      public static ArrayList<Integer> getListOfFactors(int number)
8      {
9          ArrayList<Integer> primeFactors = new ArrayList<Integer>();
10
11         for( int e = 2; e < number; e++ )
12             if( number % e == 0 )
13                 primeFactors.add(e);
14
15         return primeFactors;
16     }
17
18     public static void keepOnlyCompositeNumbers( List<Integer> nums ) {
19         int[] primeNums = {2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53,
20             59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, 127, 131, 137, 139,
21             149, 151, 157, 163, 167, 173, 179, 181, 191, 193, 197,
22             199, 211, 223, 227, 229, 233, 239, 241, 251, 257, 263,
23             269, 271, 277, 281, 283, 293,
24             307, 311, 313, 317, 331, 337, 347, 349, 353, 359, 367,
25             373, 379, 383, 389, 397, 401, 409, 419, 421, 431, 433,
26             439, 443, 449, 457, 461, 463,
27             467, 479, 487, 491, 499, 503, 509, 521, 523, 541};
28
29         ArrayList<Integer> compositeNumbers = new ArrayList<Integer>();
30         ArrayList<Integer> numsToRemove = new ArrayList<Integer>();
31
32         for( int e: nums )
33             compositeNumbers.add( e );
34
35         for( int e: nums )
36             for( int i: primeNums)
37                 if( i == e ) {
38                     numsToRemove.add( e );
39                     break;
40                 }
41
42         for( int e: numsToRemove )
43             compositeNumbers.remove( e );
44         out.println( compositeNumbers.toString() );
45     }
46 }
47
48 /*
49 [3]
50 []
51 [2, 5, 10, 25]
52 [2, 4, 5, 10, 20, 25, 50]
53 [2, 3, 6, 127, 254, 381]
54
55 Original List
56 [2, 6, 8, 9, 10, 12, 13, 15, 17, 24, 55, 66, 78, 77, 79]
57 Composite List
58 [6, 8, 9, 10, 12, 15, 24, 55, 66, 78, 77]
59 */

```