

```
1 import java.util.ArrayList;
2
3 public class Question4 {
4
5     public static int findLargestPalindrome(int a, int b) {
6         int maxPalindrome = 0;
7         int c;
8
9         ArrayList<Integer> palindromes = new ArrayList<Integer>();
10
11         for (int i = a; i >= 0; i--) {
12             for(int j = b; j>= 0; j--) {
13                 c = i*j;
14
15                 if (checkIfPalindrome(c)==true) {
16                     palindromes.add(c);
17
18                 }
19
20             }
21         }
22
23         for(int k = 0; k < palindromes.size(); k++) {
24             if(palindromes.get(k)>maxPalindrome) {
25                 maxPalindrome = palindromes.get(k);
26             }
27         }
28
29         return maxPalindrome;
30 }
31
32 public static boolean checkIfPalindrome(int c) {
33
34     String d = String.valueOf(c);
35     //System.out.println(d);
36     int dl = d.length();
37
38     for(int q=0; q<(dl/2); q++) {
39
40         if (d.charAt(q) !=(d.charAt(dl-(q+1)))) {
41             return false;
42         }
43     }
```

```
44
45     return true;
46 }
47
48
49     public static void main(String[] args) {
50         // TODO Auto-generated method stub
51 // find all palindromes using a nested for loop, find the max of
    these
52 System.out.println(findLargestPalindrome(999,999));
53
54
55
56     }
57
58 }
59
```