********** OUTPUT **********

It correctly checks and finds consecutive numbers:

```
Welcome to Online IDE!! Happy Coding :)

Number checked:100
This is value stored for original element:100
This is value stored for last consecutive element:100

Number checked:4
This is value stored for original element:4
This is value stored for last consecutive element:4

Number checked:200
This is value stored for original element:200
This is value stored for last consecutive element:200

Number checked:1
Consecutive number found:2
Consecutive number found:3
Consecutive number found:4
This is value stored for original element:1
This is value stored for last consecutive element:4

Number checked:3
Consecutive number found:4
This is value stored for original element:3
This is value stored for last consecutive element:4

Number checked:2
Consecutive number found:3
Consecutive number found:4
This is value stored for original element:2
This is value stored for last consecutive element:4

Highest streak consecutive numbers: 4
These are consecutive numbers:
1
2
3
4
```

```
/*
Online Java - IDE, Code Editor, Compiler

Online Java is a quick and easy tool that helps you to build, compile, test your programs online.
*/

public class Main
{
   public static void main(String[] args) {
      System.out.println("Welcome to Online IDE!! Happy Coding :)");

      int []nums = new int[]{100,4,200,1,3,2};   // This is the defined array
      boolean consecutive;  // this will be used to check if a consecutive number found
      int [] []consecutiveCount = new int[nums.length][4];
     // this will hold all data so that maximum can be outputted screen
      int differenceCheck=0;
      int k=0;
      int temp=0;
      int numberHighestConsecutive=0;  //this will be used to output array to end user

      for (int i=0; i<nums.length;i++)   // this will go through each array element
      {
         consecutive=false;
         System.out.println("\nNumber checked:"+nums[i]);

         for (int j=0;j<nums.length;j++)   // this will check each number against array element i
         {
            differenceCheck=1;      // consecutive number at array element j will be 1 higher

            if (j==i)
// this will ensure same array element not compared. However it will not affect outcome
            {
               j++;
            }
            if (j!=nums.length)          //to ensure execution within the array
            {
               if (nums[j]==nums[i]+differenceCheck)  //if consecutive number found to value at
element i
               {

                  System.out.println("Consecutive number found:"+nums[j]);
                  j=nums.length-1; // this is to save loop execution since once it has found
//consecutive, no need to search remaining array since consecutive will hold same value
                  consecutive=true; // this is to inform next loop that a consecutive found
                  differenceCheck++;
// the next consecutive number is now one more greater than element i
               }

               k=nums.length;
// to save loop execution. If no consecutive numbers, this ensures the next element i
                           // can be processed
            }

            for (k=0; k<nums.length; k++)
```

```
            {
               if (k==i)
// this will ensure same array element not compared. However it will not affect outcome
               {
                  k++;

               }
               if (k!=nums.length)
               {
                  // ensures next element is now one consecutive to element j.
                  if (nums[k]==nums[i]+differenceCheck & consecutive==true)

               {
                  System.out.println("Consecutive number found:"+nums[k]);
                  differenceCheck++;
                  k=0;
// this will ensure the array is checked again for any further consecutive numbers

               }

               }

            }

         }

         consecutiveCount[i][0]=differenceCheck;
//this stores the consecutive numbers for each initial array element


         consecutiveCount[i][2]=nums[i];    //this stores the initial array element examined
         System.out.println("This is value stored for original element:" + consecutiveCount[i][2]);

         consecutiveCount[i][1]=nums[i]+(differenceCheck-1);
//reduced by 1 since when last consecutive element found, coding increases
 //variable by 1 for next potential search

         System.out.println("This is value stored for last consecutive element:" +
consecutiveCount[i][1]);




      }

      for (int m=0; m<consecutiveCount.length;m++)
      {
         if (consecutiveCount[m][0]>temp)
         {
            temp=consecutiveCount[m][0];

            numberHighestConsecutive=consecutiveCount[m][2];
// this is initial array element with highest consecutive count
```

```
            }
        }
        System.out.println("\nHighest streak consecutive numbers: " + temp);
        System.out.println("These are consecutive numbers: ");



         for (int n=0; n<temp;n++)
        {

            System.out.println(numberHighestConsecutive+n);

        }

    }
}
```