

Exceptions

1. Read through the following code. It works fine as long as the user inputs an integer inclusively from zero to nine for `wholeNumber`. Inputting an integer greater than nine will cause an `ArrayIndexOutOfBoundsException` to occur. Revise this code to *catch* this type of exception and print an appropriate error response to the user.

```
import chn.util.*;

public class Array
{
    public static void main (String[] args)
    {
        ConsoleIO console = new ConsoleIO();
        int[] nums = new int[10];
        System.out.println("Calculate the squares of the first
                           ten whole numbers!");

        for (int i = 0; i < 10; i++)
            nums[i] = i * i;

        System.out.print("Now, pick a whole number and
                        access its square: ");
        int wholeNumber = console.readInt();
        System.out.println("The square of " + wholeNumber
                           + " is: " + nums[wholeNumber]);
    }
}
```

2. Running the following short program causes a `NullPointerException`. Revise this code to *catch* this type of exception and print an appropriate error response to the user.

```
import chn.util.*;

public class Words
{
    public static void main (String[] args)
    {
        String word = null;
        System.out.println(word.length());
    }
}
```