```java
// Lab 4: Zillion, but in Java
// First Java lab!
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// CSCI 1913

class Zillion {
  private int[] array;

  public Zillion(int size) {
    array = new int[size];
  }

  public void increment() { // change all 9's to 0's, go up 1
    int i = (array.length) -1;
    while((i >= 0) && (array[i] == 9)) {
      array[i] = 0;
      i -= 1;
    }

    if(i >= 0){
      array[i] += 1;
    }
  }

  public String toString(){ // convert to string by appending array
  elements to a string

    String myString = "";
    for (int i = 0; i < array.length; i++){
      myString += array[i];
    }
    return myString;
  }


  }
  class Driver
  {
    public static void main(String[] args)
    {
      Zillion z = new Zillion(2);
      System.out.println(z);  //  00  2 points

      z.increment();
      System.out.println(z);  //  01  2 points

      z.increment();
```

```
47              System.out.println(z);  //  02  2 points

48

49              z.increment();
50              z.increment();
51              z.increment();
52              z.increment();
53              z.increment();
54              z.increment();
55              z.increment();
56              z.increment();

57

58              System.out.println(z);  //  10  2 points
59              z.increment();
60              System.out.println(z);  //  11  2 points

61

62              z = new Zillion(4);
63              System.out.println(z);  //  0000  2 points

64

65              for (int j = 1; j <= 999; j += 1)
66              {
67                z.increment();
68              }
69              System.out.println(z);  //  0999  2 points

70

71              z.increment();
72              System.out.println(z);  //  1000  2 points

73

74              for (int j = 1; j <= 999; j += 1)
75              {
76                z.increment();
77              }
78              System.out.println(z);  //  1999  2 points

79

80              z.increment();
81              System.out.println(z);  //  2000  2 points

82

83              for (int j = 1; j <= 7999; j += 1)
84              {
85                z.increment();
86              }
87              System.out.println(z);  //  9999  2 points

88

89              z.increment();
90              System.out.println(z);  //  0000  2 points

91

92              z.increment();
93              System.out.println(z);  //  0001  1 point
```

```
93          System.out.println(2);   //  0001   1 point
94      }
95  }
96
```