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

TEST SCENARIO 1

```
String [] scores = new String[]{"95%", "83%", "90%", "87%", "88%", "93%"};
//String [] scores = new String[]{"10%"};
//String [] scores = new String[]{"53%","79%"};
```

```
Welcome to Online IDE!! Happy Coding :)
Missing grade: 54%


** Process exited - Return Code: 0 **
```

TEST SCENARIO 2

```
//String [] scores = new String[]{"95%", "83%", "90%", "87%", "88%", "93%"};
String [] scores = new String[]{"10%"};
//String [] scores = new String[]{"53%","79%"};
```

```
Welcome to Online IDE!! Happy Coding :)
Missing grade: 0%


** Process exited - Return Code: 0 **
```

TEST SCENARIO 3

```
//String [] scores = new String[]{"95%", "83%", "90%", "87%", "88%", "93%"};
//String [] scores = new String[]{"10%"};
String [] scores = new String[]{"53%","79%"};
```

```
Welcome to Online IDE!! Happy Coding :)
Missing grade: 51%


** Process exited - Return Code: 0 **
```

*** CODE **

```
/*
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 String takeDownAverage(String scores[])
   {
      System.out.println("Welcome to Online IDE!! Happy Coding :)");

      //String [] scores = new String[]{"53%", "79%"};

      int [] numbers = new int[scores.length];
      String temp;
      double average;
      double totalNumbers=scores.length;
      double total=0;
      int missingGrade;

      for (int i=0; i< scores.length; i++)
      {
         //The percentage can be in position 1  (i.e  8%) or position 2 (i.e 20%)   - zero index
based

         if (scores[i].indexOf("%")==1)
         {
            temp=scores[i].substring(0,1);
            numbers[i]=Integer.valueOf(temp);

         }
         else
         {
            temp=scores[i].substring(0,2);
            numbers[i]=Integer.valueOf(temp);
         }
      }

      for (int number: numbers)
      {
         total=total + number;
      }
      average = total/totalNumbers;

      // missing grade is calculated from the following formula:
```

```
      // [total 'existing numbers' +  x ('unknown' missingGrade)]   / [totalNumbers + 1]    =
'New Average' (average - 5)

      //formula can be re-arranged as follows:

      //missingGrade =  [New Average (average - 5)] * [totalNumbers + 1]     -  total existing
numbers

      missingGrade =  (int)   ((average-5) * (totalNumbers+1)   -  total);



      return  Integer.toString(missingGrade) +"%";

   }

   public static void main(String[] args)
   {

      //String [] scores = new String[]{"95%", "83%", "90%", "87%", "88%", "93%"};
      //String [] scores = new String[]{"10%"};
      String [] scores = new String[]{"53%","79%"};



      System.out.println("Missing grade: " + takeDownAverage(scores));
   }
}
```