Java Week 9 : Q1

Due on 2020-04-03, 23:59 IST

Complete the code to develop a BASIC CALCULATOR that can perform operations like Addition, Subtraction, Multiplication and Division.

Note the following points carefully:
1. Use only double datatype to store calculated numeric values.
2. Assume input to be of integer datatype.
3. The output should be rounded using Math.round() method.
4. Take care of the spaces during formatting output (e.g., single space each before and after =).
5. The calculator should be able to perform required operations on a minimum of two operands as shown in the below example:

Input:  
\[ 5+6 \]

Output:  
\[ 5+6 = 11 \]

Sample Test Cases

<table>
<thead>
<tr>
<th>Test Case</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Case 1</td>
<td>5*5</td>
<td>5*5 = 25</td>
</tr>
<tr>
<td>Test Case 2</td>
<td>5/5</td>
<td>5/5 = 1</td>
</tr>
<tr>
<td>Test Case 3</td>
<td>5+6</td>
<td>5+6 = 11</td>
</tr>
<tr>
<td>Test Case 4</td>
<td>6-5</td>
<td>6-5 = 1</td>
</tr>
</tbody>
</table>
The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.
Sample solutions (Provided by instructor)

```java
import java.util.Scanner;
public class Question91{
    public static void main(String args[]){
        Scanner sc = new Scanner(System.in);
        String input = sc.nextLine(); // Read as string, e.g., 5+6
        // Declare and initialize the required variable(s)
        int i=0;
        double output=0;
        // Split the input string into character array
        char seq[] = input.toCharArray();
        /*
         * Use some method to separate the two operands
         * and then perform the required operation.
         *
         * for(int a=0; a<seq.length; a++){
         * if(seq[a]=='+'{ // Read as integer, e.g., 5+6
         *     i=Integer.parseInt(input.substring(0,a));
         *     j=Integer.parseInt(input.substring(a+1,seq.length));
         *     output = (double)i+j;
         * }else if(seq[a]=='-'{
         *     i=Integer.parseInt(input.substring(0,a));
         *     j=Integer.parseInt(input.substring(a+1,seq.length));
         *     output = (double)i-j;
         * }else if(seq[a]=='/'{ // Read as integer, e.g., 5+6
         *     i=Integer.parseInt(input.substring(0,a));
         *     j=Integer.parseInt(input.substring(a+1,seq.length));
         *     output = (double)i/j;
         * }else if(seq[a]=='*'{
         *     i=Integer.parseInt(input.substring(0,a));
         *     j=Integer.parseInt(input.substring(a+1,seq.length));
         *     output = (double)i*j;
         * }
         * // Print the output as stated in the question
         * System.out.println(input+" = "+Math.round(output));
        }
    }
```