

Instructions

Create class **Summation**, which shall add up numbers from 1 to N.

The main method in **Summation** should perform the summation and output the result in the format shown in the example below.

Summation should:

- Prompt the user to enter an integer
- Read the integer
- Use a **while loop** to calculate the sum of all the integers from 1 to the integer the user entered.
- Print out the sum calculated with the **while** loop, in the format shown in the example below.

Thus, if the user enters, for instance, 12, your program should output 78.

Be sure your indentation and documentation are correct.

Example run (input in **bold**):

```
Enter N: 33  
The sum of all i, where i runs from 1 to 33 equals 561.
```

To test your program, obtain **AutoGrade.jar**. Put it and a copy of your **Summation.java** in the same directory. Then run it as shown in the example below:

```
MYPROMPT> java -jar AutoGrade.jar Summation  
Compilation is successful  
Input value: 414  
Right Answer: "The sum of all i, where i runs from 1 to 414 equals 85905."  
Your Answer: "The sum of all i, where i runs from 1 to 414 equals 85905."  
Score: 100%  
MYPROMPT>
```

When your program works correctly, submit it.