

Problem: Alternating Add and Subtract (Curried Function)

Company Tag: Squarespace

Problem Statement

You are asked to implement a function `add_subtract` that works in a **curried style** and alternately **adds** and **subtracts** the numbers passed to it.

- The **first number** is always added (considered as the starting point).
- The **second number** is subtracted.
- The **third number** is added.
- The **fourth number** is subtracted.
- And so on, alternating between addition and subtraction.

Examples

```
add_subtract(7)
```

Output: 7

```
add_subtract(1)(2)(3)
```

Steps: $1 + 2 - 3 = 0$

Output: 0

```
add_subtract(-5)(10)(3)(9)
```

Steps: $-5 + 10 - 3 + 9 = 11$

Output: 11

Input Format

- Input will consist of a sequence of integers passed as curried arguments.

Output Format

- Return the final computed integer after applying alternating addition and subtraction.
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Constraints

- Numbers can be **positive or negative**.
 - At least **one number** will always be provided.
 - You may assume that the function can handle up to 10^5 chained arguments without performance issues.
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Sample Input & Output

Input:

`add_subtract(5) (6) (7)`

Output:

4

Explanation:

$5 + 6 - 7 = 4$

Java Code Stub

```
public class AlternatingSum {  
  
    // Your task: Implement add_subtract curried style  
    public static AlternatingSum add_subtract(int num) {  
        // Implement logic here  
        return null; // placeholder  
    }  
  
    public static void main(String[] args) {  
        // Example test cases  
        System.out.println(add_subtract(7)); // 7  
        System.out.println(add_subtract(1) (2) (3)); // 0  
        System.out.println(add_subtract(-5) (10) (3) (9)); // 11  
    }  
}
```
