

Sandwich Sum

Objective

Create functionality in a Java method that finds the sum of all integers strictly between the first occurrence of a "Start" number and the first occurrence of an "End" number in a list.

Problem Description

You have a list of integers. You want to sum all the numbers strictly between the first occurrence of a "Start" number and the first occurrence of an "End" number.

Example:

- List: [10, 5, 2, 8, 5, 9, 10]
- Start number: 5
- End number: 9

Steps:

1. Find the index of the first occurrence of 5 - index 1
2. Find the index of the first occurrence of 9 - index 5
3. Sum the integers at indices between them (strictly between, not including start and end)
 - o Indices between: 2, 3, 4
 - o Values: 2, 8, 5
 - o Sum: $2 + 8 + 5 = 15$

Expected result: 15

Method Signature

```
public static int sumBetween(ArrayList<Integer> numbers, int startNum,  
int endNum)
```

Important: Do not change the method signature or class name **SandwichSum** as it will break the autograder!

Expected result:

```
Input: numbers = [10, 5, 2, 8, 5, 9, 10], startNum = 5, endNum = 9  
Output: 15
```

Explanation: First 5 is at index 1, first 9 is at index 5.
Numbers between (indices 2, 3, 4): $2 + 8 + 5 = 15$

Common Compilation Errors

If you see compilation errors like these:

```
[ERROR] cannot find symbol
[ERROR]   symbol:   class ArrayList
[ERROR]   location: class SandwichSum
[ERROR] cannot find symbol
[ERROR]   symbol:   variable Arrays
```

What it means: Java cannot find the `ArrayList` and `Arrays` classes because you haven't imported them.