

## Find Maximum Equal sum of Three Stacks

Given three stacks **S1**, **S2** & **S3** of size **N1**, **N2** & **N3** respectively, having only **Positive** Integers. The task is to find the possible equal **maximum sum** of the stacks with the removal of top elements allowed. Stacks are represented as an array, and the first index of the array represents the top element of the stack.

### **Example 1:**

#### **Input:**

N1 = 3, N2 = 4, N3 = 2

S1 = {4, 2, 3}

S2 = {1, 1, 2, 3}

S3 = {1, 4}

#### **Output:**

5

#### **Explanation:**

We can pop 1 element from the 1st stack, and 2 elements from the 2nd stack. Now remaining elements yield the equal sum of the three stacks, that is 5.

### **Example 2:**

#### **Input:**

N1 = 2, N2 = 1, N3 = 3

S1 = {4, 7}

S2 = {10}

S3 = {1, 2, 3}

#### **Output:**

0

#### **Explanation:**

We will never get an equal sum after popping

some elements, so the answer will be 0.

**Your Task:**

You don't need to read input or print anything. Your task is to complete the function **maxEqualSum()** which takes the arrays **S1[]**, **S2[]**, and **S3[]** and their sizes **N1**, **N2**, and **N3** as inputs and returns the maximum equal sum we can obtain.

**Expected Time Complexity:**  $O(N1+N2+N3)$

**Expected Auxiliary Space:**  $O(1)$

**Constraints:**

$1 \leq N1, N2, N3 \leq 10^5$

$1 \leq S1[i], S2[i], S3[i] \leq 10^3$

The sum,  $N1+N2+N3$  doesn't exceed  $10^6$