**Topic :** [**Programming**](https://www.interviewbit.com/courses/programming)**/** [**Two Pointers**](https://www.interviewbit.com/courses/programming/topics/two-pointers/)**/ 3 Sum**

**Question:**

**Given an array S of n integers, find three integers in S such that the sum is closest to a given number, target.**

**Return the sum of the three integers.**

**Assume that there will only be one solution**

**Example:**

**given array S = {-1 2 1 -4},**

**and target = 1.**

**The sum that is closest to the target is 2. (-1 + 2 + 1 = 2)**

**Code :**

**int Solution::threeSumClosest (vector < int >&A, int B)**

**{**

**int n = A.size ();**

**sort (A.begin (), A.end ());**

**long bestSum = 10000000000, sum = 0;**

**for (int i = 0; i < n - 2; i++)**

**{**

**int s = i + 1, e = n - 1;**

**while (s < e)**

**{**

**sum = long (A[i]) + A[s] + A[e];**

**if (abs (B - sum) < abs (B - bestSum))**

**bestSum = sum;**

**else if (sum > B)**

**e--;**

**else**

**s++;**

**}**

**}**

**return bestSum;**

**}**