package day3;

import java.util.Arrays;

import java.util.Scanner;

public class Closest\_Threesum {

public static int threeSumClosest(int[] nums, int target) {

int min = Integer.MAX\_VALUE;

int result = 0;

Arrays.sort(nums);

for (int i = 0; i < nums.length; i++) {

int j = i + 1;

int k = nums.length - 1;

while (j < k) {

int sum = nums[i] + nums[j] + nums[k];

int diff = Math.abs(sum - target);

if(diff == 0) return sum;

if (diff < min) {

min = diff;

result = sum;

}

if (sum <= target) {

j++;

} else {

k--;

}

}

}

System.out.println(result);

return result;

}

public static void main(String args[]){

Scanner s = new Scanner(System.in);

System.out.println("Enter the length of the array:");

int length = s.nextInt();

int [] nums = new int[length];

System.out.println("Enter the elements of the array:");

for(int i=0; i<length; i++ ) {

nums[i] = s.nextInt();

}

System.out.println("Enter the target of the array:");

int target = s.nextInt();

threeSumClosest(nums,target);

}

}