Question **1**

Correct

Marked out of 10.00

Akshay works for the Secret Intelligent Services. His role involves decoding cryptic information.

Recently he has received 3 sets of numbers (3 arrays of numbers). The number of elements in each set (in each array) is the same. These numbers have to be decoded to find the room number of a person staying in Hotel Double Cross. The below example demonstrates the steps to be performed while decoding the given numbers.

Example:

Let us assume that the 3 set of numbers are as below:

input1: 4

input2: {1, 2, 3, 4}

input3: {2, 3, 4, 5}

input4: {1, 3, 5, 7}

Step 1:

Generate a new set of elements by adding numbers present at the same index in the three arrays. So, we get, {4, 8, 12, 16}.

Step 2:

The array generates in Step 1 represents the position of the elements in the three arrays i.e.,

The first number 4 represents the number in 4^{th} position in the FIRST array.

The second number 8 represents the number in 8^{th} position in the SECOND array.

The third number 12 represents the number in 12^{th} position in the THIRD array.

The fourth number 16 represents the number in 16^{th} position in the FIRST array.

In Step 2, our task is to pick the numbers from these specified positions from the respective arrays, i.e.,

Number at 4^{th} position in the FIRST array is 4.

Number at 8^{th} position in the SECOND array is 5 (Note that the array contains only 4 elements, so the 8^{th} position can be found by counting the positions in cyclic manner i.e., after reaching last element of the array, continue counting from the first element of the array. This way the number in the 8^{th} position in the second array is 5).

Number at 12^{th} position in the THIRD array is 7 (apply same counting logic as above).

Number at 16^{th} position in the FIRST array is 4 (apply same counting logic as above).

So, we get the positional numbers as {4, 5, 7, 4}.

Step 3:

Add ALL the positional numbers generated in Step 2 to get the FINAL result which represents the room number in Hotel Double Cross, i.e.,

Room number = 4 + 5 + 7 + 4 = 20

Note:

1) There will always be THREE input arrays.
2) All 3 arrays will have the same number of elements.
3) The number of array elements is specified by input4.
4) The array elements will always be positive numbers greater than 0.

Example 2:

Let us now assume the 3 input arrays are as given below:

input1 = 7 (the number of elements in each of the input arrays)

input2 = {10, 33, 5, 40, 120, 98, 1}

input3 = {121, 78, 21, 32, 91, 340, 72}

input4 = {65, 320, 72, 84, 32, 843, 40}

Step 1:

The new set of elements by adding number present at the same index in the three arrays will be {196, 431, 98, 156, 243, 1281, 113}.

Step 2:

Picking up numbers from input1, input2 and input 3 based on the output of Step 1 we get:

1 (number present at position 196 in input1)

32 (number present at position 431 in input2)

40 (number present at position 98 in input3)

33 (number present at position 156 in input1)

91 (number present at position 243 in input2)

40 (number present at position 1281 in input3)

10 (number present at position 113 in input1)

Step 3:

Sum of these numbers gives the Room Number: 247

For example:

Input	Result
4 1 2 3 4 2 3 4 5 1 3 5 7	20
7 10 33 5 40 120 98 1 121 78 21 32 91 340 72 65 320 72 84 32 843 40	247

Answer: (penalty regime: 0 %)

```
s=int(input())
s1=list(map(int,input().split()))
s2=list(map(int,input().split()))
s3=list(map(int,input().split()))
posi=[]
new=[]
for i in range(s):
    r=s1[i]+s2[i]+s3[i]
    posi.append(r)
for i in range(len(posi)):
    index= (posi[i]-1)%s
    if i==0 or (i-0)%3==0:
        new.append(s1[index])
    elif i==1 or (i-1)%3==0:
        new.append(s2[index])
    elif i==2 or((i-2)%3==0):
        new.append(s3[index])
print(sum(new))

```

	Input	Expected	Got	
✔	4 1 2 3 4 2 3 4 5 1 3 5 7	20	20	✔
✔	7 10 33 5 40 120 98 1 121 78 21 32 91 340 72 65 320 72 84 32 843 40	247	247	✔

Passed all tests! ✔