

### Sheet3

#### **Question 1 Find the Missing Number**

You are given a list of n-1 integers and these integers are in the range of 1 to n. There are no duplicates in list. One of the integers is missing in the list. Write an efficient code to find the missing integer

```
Example:  
I/P    [1, 2, 4, ,6, 3, 7, 8]  
O/P    5
```

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#### **Question 2 Two elements whose sum is closest to zero**

An Array of integers is given, both +ve and -ve. You need to find the two elements such that their sum is closest to zero.

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#### **Question 3 Find the smallest and second smallest elements in an array**

Write an efficient java program to find smallest and second smallest element in an array. Example :

```
Input:  arr[] = {12, 13, 1, 10, 34, 1}  
Output: The smallest element is 1 and  
        second Smallest element is 10
```