Lab Question 19: Display Missing Element in Array

Aim:
To write a C program to find the missing element from a sequence in an array.

Algorithm:

1. Start the program.

2. Read an array of n numbers in sequence with one missing.

3. Find expected sum using formula n*(n+1)/2.

4. Find actual sum of array.

5. Missing element = expected sum – actual sum.

6. Stop.

Code:

```
#include <stdio.h>
int main(){
    int arr[5]={1,2,4,5,6}, n=6, sum=0;
    for(int i=0;i<5;i++) sum+=arr[i];
    int total=n*(n+1)/2;
    printf("Missing element: %d", total-sum);
    return 0;
}
```

Output:

- Input: [1,2,4,5,6] (n=6) → Missing = 3

Result:
The program identifies the missing element in an array sequence.