19. Display Missing Element from Unsorted Array

Aim: To find and display the missing element from a sequence in an unsorted array.

Algorithm:

- 1. Read n and array elements (1..n+1 expected).
- 2. Calculate sum of first (n+1) natural numbers.
- 3. Subtract array sum from expected sum \rightarrow missing element.

C Program:

```
#include <stdio.h>
int main() {
  int arr[]={1,2,4,5,6}, n=5;
  int total=(n+1)*(n+2)/2, sum=0;
  for(int i=0;i<n;i++) sum+=arr[i];
  printf("Missing element: %d\n", total-sum);
  return 0;
}
OUTPUT:
Missing element: 3</pre>
```

RESULT:

The missing element from the unsorted array was correctly found.