Next topic will be - Delete & Search

Deleting element from array →

It refers to remove an existing element from the array and re-organize all elements after deletion.

Algorithm of Deletion → Let us consider LA is a linear array with N elements and K is a +ve integer such that K<=N. The algorithm to delete an element available at the Kth position of LA is —

1. Start
2. Set J=K
3. Repeat steps 4 and 5 while J<N

4. Set LA[J-1] = LA[J]

5. Set J = J + 1

6. Set N = N - 1

7. Stop

By implementing this programmatically in C we can have the program as :—

```
#include<stdio.h>
void main(){
    int LA[]={11, 13, 15, 17, 18};
    int k=3, n=5;
    int i, j;
printf("The original array elements are :\n");
for(i=0; i<n; i++){
 printf("LA[%d] = %d \n", i, LA[i]);
 }
    j=k;
      while(j<n){
        LA[j-1] = LA[j];
          j=j+1;
      }
      n=n-1;
```

```
printf("The array elements after deletion:\n");
for(i=0; i<n; i++)
{
printf("LA[%d] = %d\n", i, LA[i]);
}
getch();
}
```

After compile and execute the above program, we will get the output as follows:—

The original array elements are:

LA[0] = 11
LA[1] = 13
LA[2] = 15
LA[3] = 17
LA[4] = 18

The array elements after deletion:

LA[0] = 11
LA[1] = 13
LA[2] = 17
LA[3] = 18