S.No: 1	Exp. Name: ***C program to insert and delete the element of one dimensional array.***	Date:2023-06-10

Aim:

Write C program to insert and delete the element of one dimensional array

Source Code:

array.c

```
#include<stdio.h>
int main()
{
   int arr[10],n,i,pos,new;
   printf("Enter the size of the array: ");
   scanf("%d",&n);
   printf("Enter the elements of the array:\n");
   for(i=0;i<n;i++)
   scanf("%d",&arr[i]);
   printf("Enter the position where you want to insert an element: ");
   scanf("%d",&pos);
   printf("Enter the value to insert: ");
   scanf("%d",&new);
   for(i=n-1;i>=pos;i--)
   arr[i+1]=arr[i];

   arr[pos]=new;
   printf("Element inserted successfully!\n");
   printf("Enter the position of the element you want to delete: ");
   scanf("%d",&pos);
   for(i=pos;i<=n;i++)
   arr[i]=arr[i+1];
   printf("Element deleted successfully!\n");
   printf("Updated array:\n");
   for(i=0;i<n;i++)
   printf("%d ",arr[i]);
   printf("\n");
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter the size of the array: 4
Enter the elements of the array: 1 5 2 3
Enter the position where you want to insert an element: 2
Enter the value to insert: 11
Element inserted successfully! 4
Enter the position of the element you want to delete: 4
Element deleted successfully!
Updated array:
1 5 11 2

Test Case - 2
User Output
Enter the size of the array: 7
Enter the elements of the array: 11 22 33 44 55 66 77
Enter the position where you want to insert an element: 1
Enter the value to insert: 88
Element inserted successfully! 7
Enter the position of the element you want to delete: 7
Element deleted successfully!
Updated array:
11 88 22 33 44 55 66

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2022-2026-CSE-B

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