```
#include<stdio.h>
void main()
{
  int n,a[10],i,pos,ele;
  char ch;
  printf("Enter the size of array\n");
  scanf("%d",&n);
  printf("Enter the elements of array\n");
  for(i=0;i<n;i++)
  {
     scanf("%d",&a[i]);
  }
  printf("\nThe array elements are \n");
  for(i=0;i<n;i++)
  {
     printf("%d\t",a[i]);
  }
  printf("\nEnter the choice\n 1 for insertion \t 2 for
deletion\n");
  scanf(" %c",&ch);
  switch(ch)
  {
    case '1': printf("Enter the postion where new element is
inserted\n");
           scanf("%d",&pos);
           printf("Enter the element to be inserted\n");
           scanf("%d",&ele);
           for(i=n-1;i>=pos;i--)
           {
              a[i+1]=a[i];
           }
           a[pos]=ele;
           n++;
           printf("The array after insertion\n");
           for(i=0;i<n;i++)
           {
           printf("%d",a[i]);
           }
           break;
```

```
    case '2':printf("Enter the position where element is
deleted\n");
        scanf("%d",&pos);
        printf("Enter the element to be deleted\n");
        scanf("%d",&ele);
        ele=a[pos];
        for(i=pos;i<n-1;i++)
        {
            a[i]=a[i+1];
        }
        n--;
        printf("The array after deletion of element\n");
        for(i=0;i<n;i++)
        {
            printf("%d\t",a[i]);
        }
        break;
    default:printf("invalid choice");
  }
}
```

Compile Result

```
Enter the size of array
5
Enter the elements of array
1 2 3 4 5

The array elements are
1       2       3       4       5
Enter the choice
 1 for insertion         2 for deletion
2
Enter the position where element is del
eted
4
Enter the element to be deleted
5
The array after deletion of element
1       2       3       4
[Process completed (code 4) - press Ent
er]
```

Compile Result

```
Enter the size of array
5
Enter the elements of array
1 2 3 4 5

The array elements are
1       2       3       4       5
Enter the choice
 1 for insertion         2 for deletion
1
Enter the postion where new element is
inserted
0
Enter the element to be inserted
0
The array after insertion
012345
[Process completed (code 6) - press Ent
er]
```

Algorithem

Step 1 : Start

Step 2 : input n

Step 3 : Display enter arrays element

for (i=0 ; i<n; i++)

input a[i]

Step 4 : Enter the choice 1 for insertion 2 for deletion

input ch

Step 5 : switch(ch)

case '1' : input pos, ele

for(i= n-1; i>=pos ; i--)

a[i+1] = a[i]

a[pos] = ele

n++

display arrays after insertion

for(i=0; i<n; i++)

output a[i];

break

case '2' : Input pos, ele

ele = a[pos]

for (i=pos; i<n-1; i++)

a[i] = a[i+1]

n--

Display array after deletion

for(i=0; i<n; i++)

output a[i]

break

default : Display invalid choice.

Step 6 : Stop

Date

flowchart