```
#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
Enter the elements of array
1 2 3 4 5
The array elements are
                                 5
                         4
Enter the choice
                          2 for deletion
1 for insertion
2
Enter the position where element is del
eted
4
Enter the element to be deleted
5
The array after deletion of element
[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
                         4
Enter the choice
 1 for insertion
                          2 for deletion
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]
```

Algoriethem Step 1: stood Step 2: enhutr slip 3: Desplay enlis array element bor (1=0;1<n,1++) emput a [1] step 4: Enter the choic z por ensortion 2 bor diletion enpul ch styps: sautch(ch) ease": emplet has, ele 1007 (i= n-1; 47= pas; i--) a Citi] = a CP7 a Cros Irele net display array after ensertion Aur (i=o; i < n; i++1 outpil aCPJ; break scales' : Input pos, ele ele = a [Pas] Not (i=Pol; icn-1; i++) a CPJ = a Citi] 7-1 n--Display array after deletion . Norli=o; icn; i+tl output acr7

default: Display invaled shoet

break

Slep 6: stop

flow chart enput n Entir array element, enpil acri Enter the choice 1 601 ensortion & a boldulion Input ch Switch (ch) Input no ele Torus last. bolli=n-1; 1>=pd/i-) ari+1)=a[1] palx acpost = eli ensortion insortion output ali I break enpir pos ele de =a [not] Aprilia pod; ich-ljitt) CON 2 a CPJ=a Ci+1] array aptivaletion best lieo; i < n; i+e) output aCPI break depault) Trace I mualid hour