ARRAY OPERATIONS

CODE:

```c
#include<stdio.h>

#include<conio.h>

void main()

{

    int n,a[50],pos,i,x,choice,item;

    printf("\n Enter the size:");

    scanf("%d",&n);

    printf("\n Enter the elements \n");

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

    {

        scanf("%d",&a[i]);

    }

    printf("\n Array Operations:");

    printf("\n 1.Array Insert \n");

    printf("\n 2.Array Delete \n");

    printf("\n 3.Array Traverse \n");

    printf("\n 4.Array Search");

    printf("\n Enter the choice:");

    scanf("%d",&choice);

    switch(choice)

    {

    case 1:

        {
```

```c
        printf("\n Enter element and position to be Insert at:");

        scanf("%d %d",&x,&pos);

        pos--;

        for(i=n;i!=pos;i--)

          a[i]=a[i-1];

           a[i]=x;

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

        {

          printf("\n %d",a[i]);

        }

    }
case 2:

   {

        printf("\n Enter element and position to be Delete at:");

        scanf("%d %d",&x,&pos);

        pos--;

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

        {

          if(i>pos)

             a[i]=a[i+1];

        }

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

          if(a[i]!=0)

        printf("\n %d",a[i]);

   }
case 3:
```

```c
{
    printf("\n Traversal \n -----------\n\n the element are:");
    for(i=0;i<n;i++)
     printf("%3d",a[i]);
}
case 4:
  {
    printf("\n Enter the element to be Searched item:");
    scanf("%d",&item);
    for(i=0;i<n;i++)


      if(a[i]==item)
     printf(" element is found");


  }


default:
  printf("\n Invalid Option:");
  }
  getch();
}
```

OUTPUT

```
Enter the size:5

Enter the elements
1
2
3
4
5

Array Operations:
1.Array Insert

2.Array Delete

3.Array Traverse

4.Array Search
Enter the choice:1

Enter element and position to be Insert at: 6 2

1
6
2
3
4
5
Enter element and position to be Delete at:3 2

1
6
3
4
5
Traversal
-----------

the element are:  1  6  3  4  5
Enter the element to be Searched item:2

Invalid Option:_
```