

TRAVERSING, INSERTION, DELETION

-----IN C+-----

```
#include<iostream>
using namespace std;

//TRAVERSING
void TRAVERSING(int size,int HARSHIDA[],int i)
{
    cout<<"The elements in the array is as follows="<<endl<<"[";
    for (i=0;i<size;i++)
    {
        cout<<HARSHIDA[i]<<" ";
    }
    cout<<"]";
}

//INSERTION
void INSERTION(int size,int ARR[],int i)
{
    int index;
    cout<<"Enter the index where the element is to be inserted="<<endl;
    cin>>index;
    int element;
    cout<<"Enter the element which is to be inserted="<<endl;
    cin>>element;
    for (i=size-1;i>=index;i--)
    {
        ARR[i+1]=ARR[i];
    }
    ARR[index]=element;
    size++;
    cout<<"Let's check!"<<endl;
    cout<<"[";
    for (i=0;i<size;i++)
    {
        cout<<ARR[i]<<" ";
    }
    cout<<"]";
}

//DELETION
void DELETION(int size,int ARR[],int i)
{
    int index;
```

```

        cout<<"Enter the index where the element is to be deleted="<<endl;
        cin>>index;
        for (i=index;i<size;i++)
        {
            ARR[i]=ARR[i+1];
        }
        size--;
        cout<<"Let's check!"<<endl;
        cout<<"[";
        for (i=0;i<size;i++)
        {
            cout<<ARR[i]<<" ";
        }
        cout<<"]";
    }
}

int main    ()
{
    int size,i;
    cout<<"Enter the size of the array="<<endl;
    cin>>size;
    int ARR[size];
    cout<<"Enter the elements in the array="<<endl;
    for (i=0;i<size;i++)
    {
        cin>>ARR[i];
    }
    int condition;
    cout<<"Enter the condition where we need to switch=1.For Traversing,2.For I
nsertion,3.For Deletion."<<endl;
    cin>>condition;
    switch(condition)
    {
        case 1:
            TRAVERSING(size,ARR,i);
            break;
        case 2:
            INSERTION(size,ARR,i);
            break;
        case 3:
            DELETION(size,ARR,i);
            break;
        default:
            cout<<"Invalid Condition."<<endl;
            break;
    }
    return 0;
}

```

IN C LANGUAGE

-----For insertion-----

```
#include<stdio.h>

#include<conio.h>

void main()
{
    int n;

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

    scanf("%d",&n);

    int a[n],loc,i,item;

    printf("\nEnter array elements:\n");

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

    {

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

    printf("\n Entered Array elements are :\n");
```

```
for(i=1;i<=n;i++)
```

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

```
printf("\n Enter the position where we want to insert the element:");
```

```
scanf("%d",&loc);
```

```
printf("\n Enter the item to be inserted:");
```

```
scanf("%d",&item);
```

```
int ctr=n;
```

```
n=n+1;
```

```
while (ctr>=loc)
```

```
{
```

```
    a[ctr+1]=a[ctr];
```

```
    ctr--;
```

```
}
```

```
a[loc]=item;
```

```
printf("\n ArrAY AFTER INSERTION is:\t");
```

```
for (i=1;i<=n;i++)
```

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

```
}
```

-----FOR DELETION-----

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
void main()
```

```
{
```

```
int n;
```

```
printf("\n Enter the size of array:");
```

```
scanf("%d",&n);
```

```
int a[n],loc,i,item;
```

```
printf("\nEnter array elements:\n");
```

```
for(i=1;i<=n;i++)
```

```
{
```

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

```
printf("\n Entered Array elements are :\n");
```

```
for(i=1;i<=n;i++)
```

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

```
printf("\n Enter the position where we want to delete the element:");
```

```
scanf("%d",&loc);
```

```
int ctr=n;
```

```
while (loc<=ctr)
```

```
{
```

```
a[loc]=a[loc+1];
```

```
loc++;
```

```
}
```

```
n=n-1;
```

```
printf("\n ArrAY AFTER DELETION is:\t");
```

```
for (i=1;i<=n;i++)
```

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

```
}
```
