DSA Practical No -2

AIM :- [A] : Create an array of size n and write a program to insert an element (beginning, end and specific position).

[B]:- Create an array of size n and write a program to delete an element (begining, end and specific position).

Program:

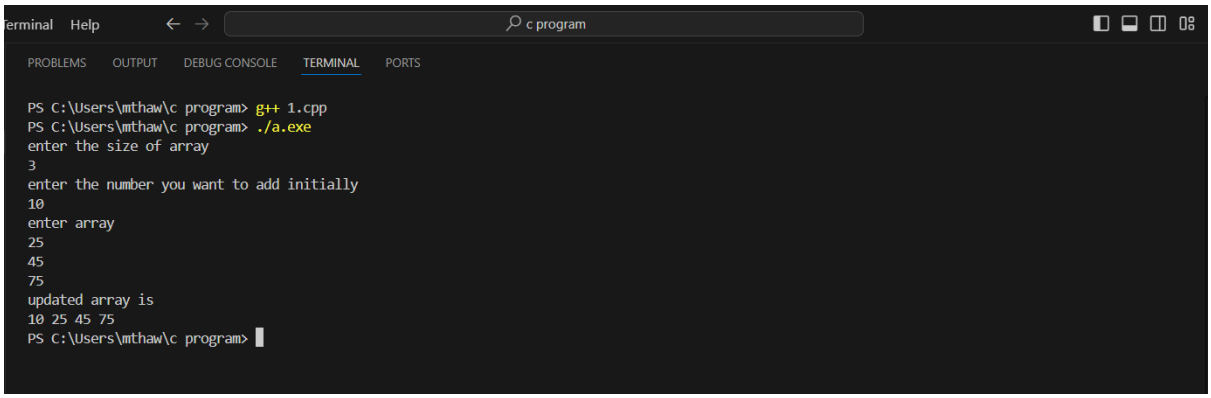
[A] Insertion at begining

```
#include<iostream>
using namespace std;
int main(){
   int arr[100];
   int size;
   cout<<"enter the size of array"<<endl;
   cin>>size;
   int no;
   cout<<"enter the number you want to add initially"<<endl;
   cin>>no;
   cout<<"enter array"<<endl;
   for(int i=0;i<size;++i){
      cin>>arr[i];
   }
   for(int i=size;i>0;--i){
      arr[i]=arr[i-1]
```

```
 }
   arr[0]=no;
   cout<<"updated array is"<<endl;
   for(int i=0;i<=size;++i){
      cout<<arr[i]<<" ";
   }

}
```

Output:



[A] Insertion at end

```
#include<iostream>
using namespace std;
int main(){
   int array[50];
   int size;
   int element;
   cout<<"enter the element you want to add at end"<<endl;
   cin>>element;
   cout<<"enter the size of array"<<endl;
```

```
    cin>>size;
    cout<<"enter array"<<endl;
    for(int i=0;i<size;i++){
        cin>>array[i];
    }
    array[size]=element;
    cout<<"updated array is"<<endl;
    for(int i=0;i<=size;i++){
        cout<<array[i]<<" ";

    }

}
```

Output:

[A] Insertion at any position

```
#include<iostream>
using namespace std;
int main(){
    int array[50];
    int size;
    cout<<"enter the size of array"<<endl;
```

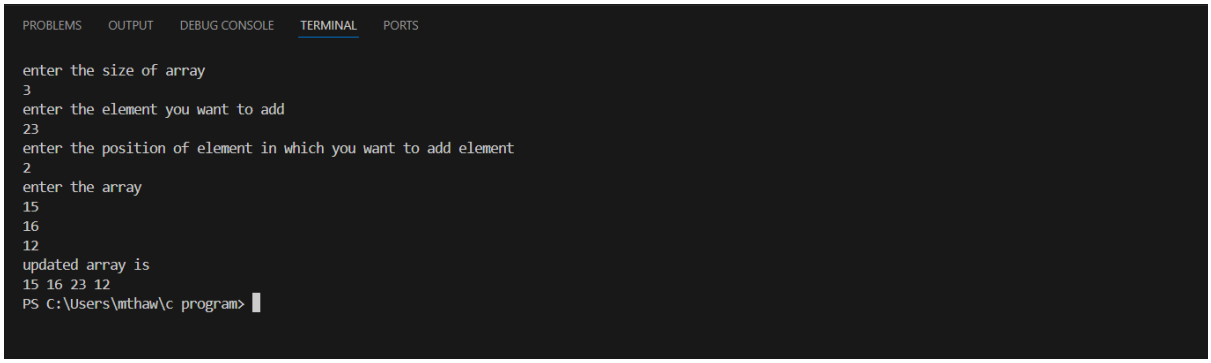
```
cin>>size;
int element;
cout<<"enter the element you want to add"<<endl;
cin>>element;
int position;
cout<<"enter the position of element in which you want to add element"<<endl;
cin>>position;
cout<<"enter the array"<<endl;
for(int i=0;i<size;i++){
   cin>>array[i];
}

for(int i=size;i>position;i--){

      array[i]=array[i-1];
   }

array[position]=element;
cout<<"updated array is"<<endl;
for(int i=0;i<=size;i++){
   cout<<array[i]<<" ";
}
}
```

Output:



[B] Deleting element at beginning

```
#include<iostream>
using namespace std;
int main(){
   int array[50];
   int size;



   cout<<"enter the size of array"<<endl;
   cin>>size;
   cout<<"enter array"<<endl;
   for(int i=0;i<size;i++){
      cin>>array[i];
   }

   cout<<"updated is array"<<endl;
   for(int i=1;i<=size-1;i++){
      cout<<array[i]<<endl;
```

```
    }

}
```

Output:

[B] Deleting element at end

```
#include<iostream>
using namespace std;
int main(){
    int array[50];
    int size;



    cout<<"enter the size of array"<<endl;
    cin>>size;
    cout<<"enter array"<<endl;
    for(int i=0;i<size;i++){
        cin>>array[i];
    }
```

```
   cout<<"updated is array"<<endl;
   for(int i=0;i<size-1;i++){
      cout<<array[i]<<endl;

   }

}
```

Output:

[B] Deleting element at any position

```
#include<iostream>
using namespace std;
int main(){
   int array[20];
   int size;
   cout<<"size of array is"<<endl;
   cin>>size;
   int pos;
   cout<<"enter position of element you want to delete"<<endl;
   cin>>pos;
```

```
   cout<<"enter array"<<endl;
   for(int i=0;i<size;i++){
      cin>>array[i];
}

for(int i=pos;i<size-1;i++){
   array[i]=array[i+1];
}
for(int i=0;i<size-1;i++){
   cout<<array[i]<<" ";
}
}
```

Output:

Github link : https://github.com/MayurThaware122/DSA