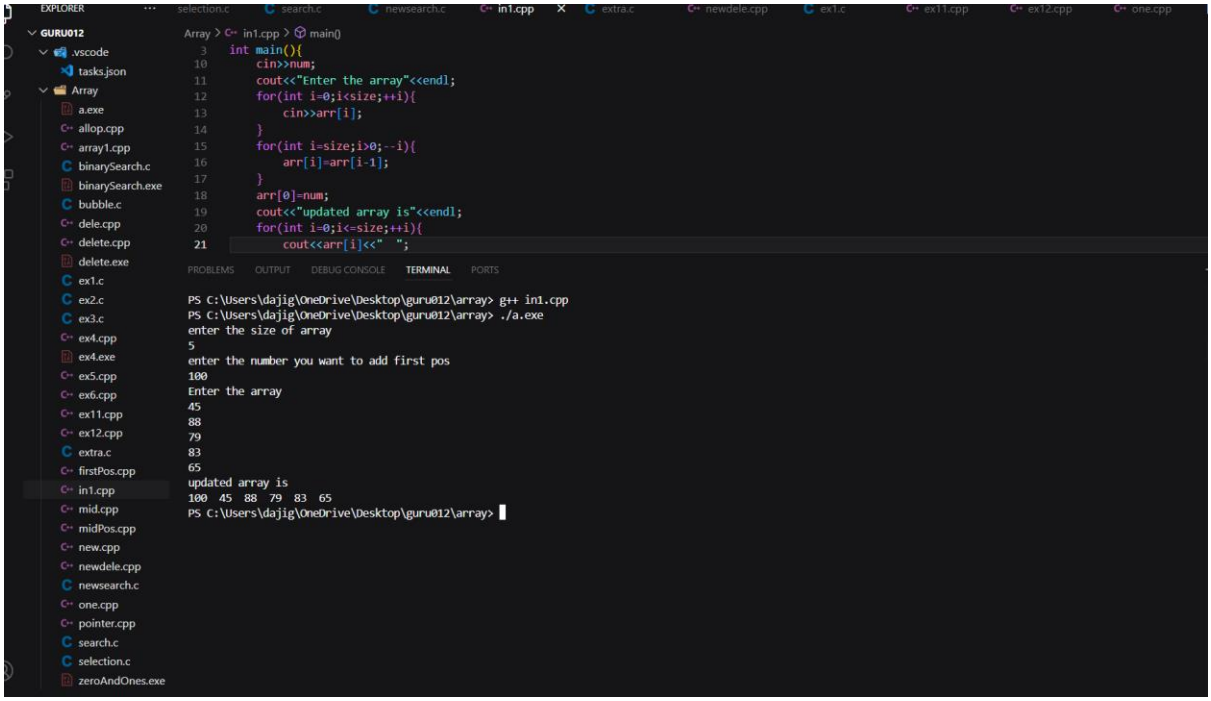
PRACTICAL NO :-02

AIM:- Create a program to insert element at first position last position and at specific position of an array .

PROGRAM:- (At First Position)

```
#include<iostream>
using namespace std;
int main(){
   int arr[100];
   int size;
   cout<<"enter the size of array"<<endl;
   cin>>size;
   int num;
   cout<<"enter the number you want to add first pos"<<endl;
   cin>>num;
   cout<<"Enter the 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]=num;
   cout<<"updated array is"<<endl;
   for(int i=0;i<=size;++i){
      cout<<arr[i]<<"  ";
   }

}
```

[OUTPUT]

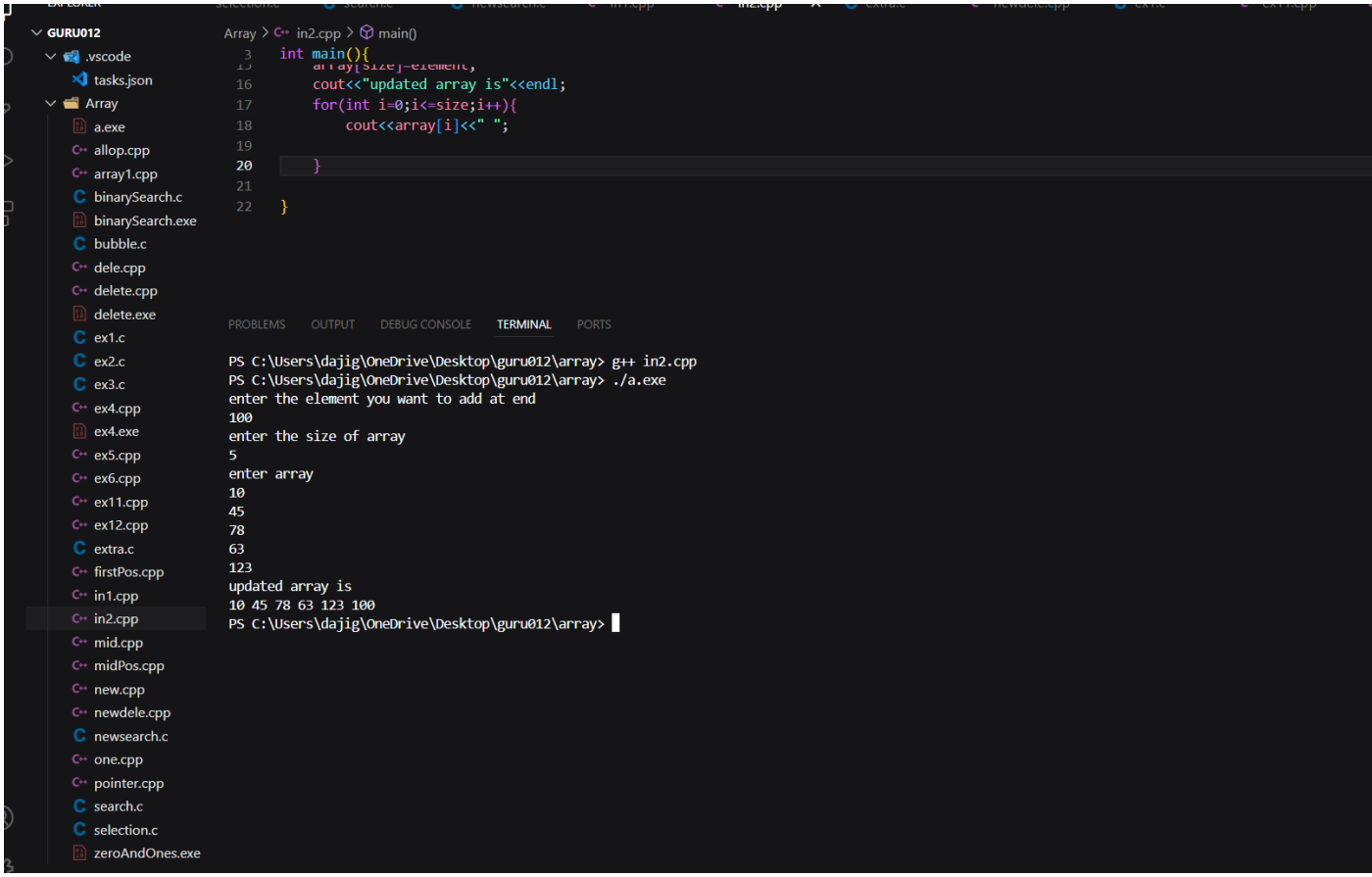


PROGRAM:- (At last position)

```
#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]

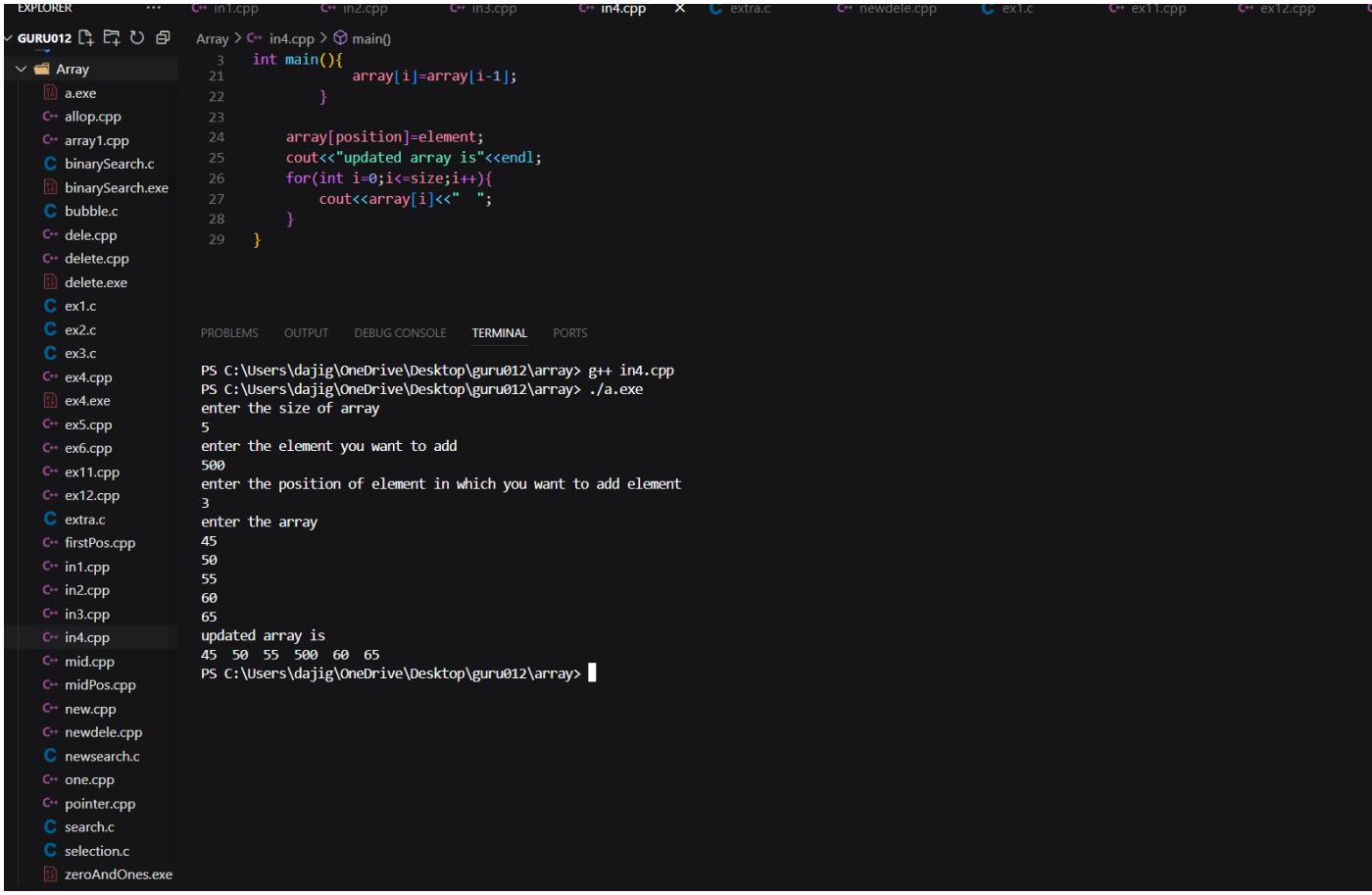


PROGRAM:- (At specific position)

```
#include<iostream>
using namespace std;
int main(){
   int array[100];
   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]

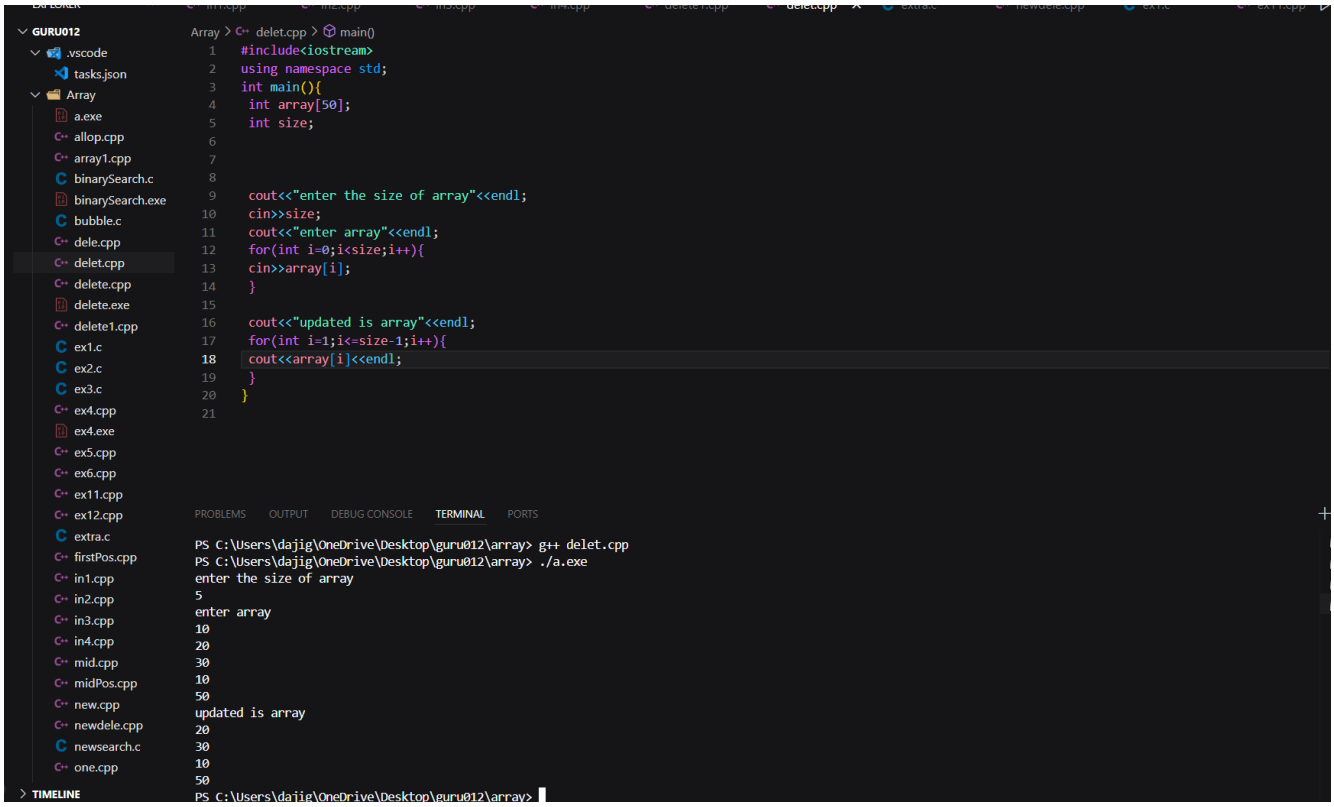


PROGRAM:- (delete at first position)

```
#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]

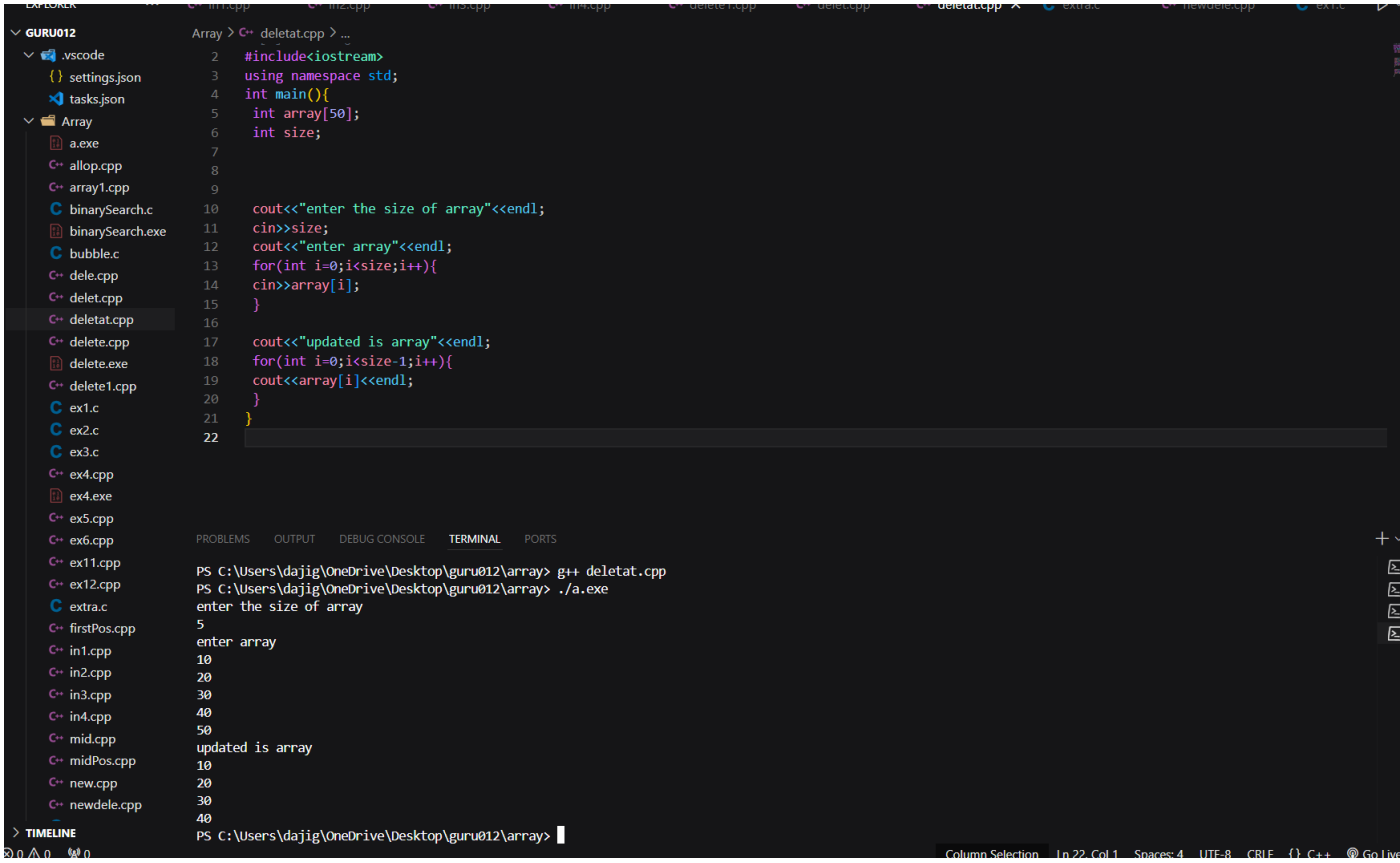


Deleting element at end

PROGRAM:-

```
#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]



Deleting element at any position

PROGRAM:-

```
#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/guru24961/Data-Stracture-practical