

(ARRAY QUESTIONS)

(ALI AKBER BSCS 3RD SS1)

INSERT ELEMENT AT ANY INDEX.

```
#include <iostream>

using namespace std;

int main(){

    int arr[15];

    int n,position,value;

    cout<<"Enter the length of the array"<<endl;

    cin>>n;

    cout<<"Current Array is "<<endl;

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

        cin>>arr[i];

    }

    cout<<"Enter the index in which value is to be inserted:"<<endl;

    cin>>position;

    if (position< 0 || position>=n) {

        cout<<"Invalid index. The index must be between 0 and " << n - 1 << endl;

        return 1;

    }

    cout<<"Enter the value you want to insert in the array:"<<endl;

    cin>>value;


    for(int i=n;i<position;i--){

        arr[i+1]=arr[i];

    }
```

```

arr[position]=value;

n++;

cout<<"Final Array is:"<<endl;

for(int i=0;i<n-1;i++){

    cout<<arr[i]<<" ";

}

return 0;

}

```

INSERT ELEMENT AT BEGINING.

//INSERT ELEMENT AT BEGINING.

```
#include <iostream>
```

```
using namespace std;
```

```

int main(){

    int arr[15];

    int n,position,value;

    cout<<"Enter the length of the array"<<endl;

    cin>>n;

    cout<<"Current Array is "<<endl;

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

        cin>>arr[i];

    }

    cout<<"Enter the value you want to insert in the array:"<<endl;

    cin>>value;

    for(int i=n-1;i>=0;i--){

```

```

        arr[i+1]=arr[i];
    }

    arr[0]=value;

    n++;

    cout<<"Final Array is:"<<endl;

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

        cout<<arr[i]<<" ";

    }

    return 0;

}

```

MAXIMUM MINIMUM VALUE.

```

//MAXIMUM MINIMUM

#include <iostream>

using namespace std;

int main(){

    int arr[15];

    int n,max,min;

    cout<<"Enter the length of the array"<<endl;

    cin>>n;

    cout<<"Current Array is "<<endl;

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

        cin>>arr[i];

    }

    max=arr[0];

    min=arr[0];

```

```

    for(int i=0;i<n;i++){
    if(arr[i]>max){
        max=arr[i];
    }
    if(arr[i]<min){
        min=arr[i];
    }
    }

    cout<<"Maximun element in the array is: "<<max<<endl;

    cout<<"Minimum element in the array is: "<<min<<endl;

    return 0;
}

```

INSERT BEFORE GIVEN INDEX.

```
//INSERT ELEMENT BEFORE GIVEN INDEX.
```

```
#include <iostream>
```

```
using namespace std;
```

```

int main(){

    int arr[15];

    int n,elem,index;

    cout<<"Enter the length of the array"<<endl;

    cin>>n;

    cout<<"Current Array is "<<endl;

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

        cin>>arr[i];

    }
}

```

```
cout<<"Enter an element to insert in the array: "<<endl;

cin>>elem;

cout<<"Enter the index of element of inserted array: "<<endl;

cin>>index;
```

```
if(index==0){

    cout<<"INSERTION FAILED!!! INDEX UNDERFLOW"<<endl;

} else{

    for (int i=n;i>index-1;i--) {

        arr[i] = arr[i-1];

    }

    arr[index-1] = elem;

    n++;

}
```

```
cout<<"New Array is: "<<endl;

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

    cout<<arr[i];

}

return 0;

}
```