

ARRAYS

1Q) Calculate the product of all the elements in the given array.

```
#include<iostream>

using namespace std;

int main(){
    int n,p=1;
    cout<<"Enter size of array: ";
    cin>>n;
    int arr[n];
    cout<<"Enter elements of the array: ";
    for(int i=0;i<n;i++){
        cin>>arr[i];
    }
    for(int i=0;i<n;i++){
        p*=arr[i];
    }
    cout<<p;
}
```

2Q) Find the second largest element in the given Array in one pass.

```
#include <iostream>

using namespace std;

int main() {
    int arr[6]={12 ,35, 1, 10, 29, 1};
    int max1=max2=INT_MIN;
    for(int i=0;i<5;i++){
        if(max1<a[i]){
            max2=max1;
            max1=a[i];
        }
        else if(max2<a[i] && a[i]!=max1){
            max2=a[i];
        }
    }
}
```

```

}
}
if(max2==INT_MIN){
cout<<"No second element exists"<<endl;
}
else cout<<max2<<endl;
return 0;
}
3Q)Find the minimum value out of all elements in the array.

```

```

#include<iostream>
using namespace std;
int main(){
    int n;
    cout<<"Enter size of array: ";
    cin>>n;
    int arr[n];
    cout<<"Enter elements of the array: ";
    for(int i=0;i<n;i++){
        cin>>arr[i];
    }
    int min=arr[0];
    for(int i=0;i<n;i++){
        if(arr[i]<min) min=arr[i];
    }
    cout<<min;
}

```

4Q)Given an array, predict if the array contains duplicates or not.

```

#include<iostream>
using namespace std;
int main(){

```

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int n;
int flag=2;
cout<<"Enter size: ";
cin>>n;
int arr[n];
cout<<"Enter elements: ";
for(int i=0;i<n;i++){
    cin>>arr[i];
}
for(int i=0;i<n;i++){
    for(int j=i+1;j<n;j++){
        if(arr[i]==arr[j]) flag=1;
    }
}
if(flag==1) cout<<"Duplicate is present";
else cout<<"Duplicate is not present";
}

```

5Q)WAP to find the smallest missing positive element in the sorted Array that contains only positive elements.

```

#include<iostream>
using namespace std;
int main(){
    int n,j;
    cout<<"Enter size: ";
    cin>>n;
    int arr[n];
    cout<<"Enter elements: ";
    for(int i=0;i<n;i++){

```

```

        cin>>arr[i];
    }
    for(int i=0;i<n;i++){
        j=i+1;
        if(arr[i]+1!=arr[j]) cout<<arr[i]+1<<" ";
        break;
    }
}

```

6Q)Predict the output.

```

}

```

As the for loop has semicolon(;) it terminates but the value of I is incremented to 49.so sub[49]=49. The output is 49