



## Assignment Solutions | Arrays - 2 | Week 5

1. Count the number of elements strictly greater than x.

Solution:

```
#include <iostream>
using namespace std;
int main() {
    int x;
    cin>>x;
    int a[5];
    cout<<"Enter 5 elements for the array"<<endl;
    for(int i=0;i<5;i++)cin>>a[i];
    int ans=0;
    for(int i=0;i<5;i++){
        if(a[i]>x) ans++;
    }
    cout<<ans<<endl;
    return 0;
}
```

2. WAP to find the largest three elements in the array.

Solution:

```

#include <iostream>
using namespace std;
int main() {
    int arr[5]={10,3,1,21,3};
    int max, max2, max3;
    max3 = max = max2 = arr[0];
    for(int i = 0; i < 5; i++){
        if (arr[i] > max){
            max3 = max2;
            max2 = max;
            max = arr[i];
        }
        else if (arr[i] > max2){
            max3 = max2;
            max2 = arr[i];
        }
        else if (arr[i] > max3)
            max3 = arr[i];
    }
    cout<<endl<<"Three largest elements of the array are "<<max<<" , "<<max2<<" ,
"<<max3;
    return 0;
}

```

3. Check if the given array is sorted or not.

Solution:

```

#include <iostream>
using namespace std;
int main() {
    int arr[5]={1,2,2,4,7};
    for (int i = 1; i < 5; i++){
        // Unsorted pair found
        if (arr[i - 1] > arr[i]){
            cout<<"NO"<<endl;
            return 0;
        }
    }
    // No unsorted pair found
    cout<<"YES"<<endl;
    return 0;
}

```

4. Find the difference between the sum of elements at even indices to the sum of elements at odd indices.

Solution:

```

#include <iostream>
using namespace std;
int main() {
    int a[5]={7,2,32,5,20};
    int sume=sumo=0;
    for(int i=0;i<5;i++){
        if(i%2==0)
            sume+=a[i];
        else
            sumo+=a[i];
    }
    cout<<abs(sume-sumo);
    return 0;
}

```

5. Given an array of integers, change the value of all odd indexed elements to its second multiple and increment all even indexed values by 10.

Solution:

```

#include <iostream>
using namespace std;
int main() {
    int arr[5]={7,2,32,5,20};
    for(int i=0;i<5;i++){
        if(i%2==0) arr[i]+=10;
        else arr[i]=2*arr[i];
        cout<<arr[i]<<" ";
    }
    return 0;
}

```

6. Find the unique number in a given Array where all the elements are being repeated twice with one value being unique.

Solution :

```
#include <iostream>
using namespace std;
int main() {
    int arr[5]={2,2,1,1,20};
    for(int i=0;i<5;i++){
        int count=0;
        for(int j=0;j<5;j++){
            if(arr[i]==arr[j])    count++;
        }
        if(count==0){
            cout<<arr[i];
            return 0;
        }
    }
    cout<<"No unique value.";
    return 0;
}
```

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