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Lab manual 8(home tasks):

Question 1:

```
int main(){
    int n, array[n], arr[1000];
    cout<<"enter the number of elements you want in the array";
    cin>>n;
    cout<<"Enter the elements of the array";
    for(int i=0; i<n; i++){
        cin>>array[i];
    }
    for(int i=0; i<n; i++){
        cout<<array[i]<<" ";
    }
    cout<<endl;
    for(int i=0; i<1000; i++){
        arr[i]=0;
    }
    int max=-1;
    for(int i=0; i<n; i++){
        arr[array[i]]++;
        if(arr[array[i]]>max){
            max=array[i];
        }
    }

    cout<<"the most repeated element is "<<max<<endl;
    cout<<"The number of times it is repeated is "<<arr[max];
}
```

```
enter the number of elements you want in the array5
Enter the elements of the array2
2
3
4
5
2 2 3 4 5
the most repeated element is 2
The number of times it is repeated is 2
-----
```

Question 2:

```

#include <iostream>
using namespace std;
int main(){
    int array[8], temp;
    cout<<"Enter the elements of the array";
    for(int i=0; i<8; i++){
        cin>>array[i];
    }
    for(int i=0; i<8; i++){
        for(int j=0; j<7-i; j++){
            if(array[j]>array[j+1]){
                temp=array[j];
                array[j]=array[j+1];
                array[j+1]=temp;
            }
        }
    }
    for(int i=0; i<8; i++){
        cout<<array[i]<<" ";
    }
    cout<<endl;
    cout<<"The smallest integer is "<<array[0]<<endl;
    cout<<"the largest integer is "<<array[7]<<endl;
    return 0;
}

```

```

Enter the elements of the array1 2 3 4 5 6 77 99
1 2 3 4 5 6 77 99
The smallest integer is 1
the largest integer is 99

-----
Process exited after 9.474 seconds with return value 0
Press any key to continue . . .

```

Question 3:

```

#include <iostream>
using namespace std;
int main()
{
    int array[5],temp;
    cout<<"Enter the elements of the array";
    for(int i=0; i<5; i++){
        cin>>array[i];
    }
    for(int i=0; i<5; i++){
        cout<<array[i]<<" ";
    }
    cout<<endl;
    temp=array[1];
    array[1]=array[3];
    array[3]=temp;
    for(int i=0; i<5; i++){
        cout<<array[i]<<" ";
    }
    return 0;
}

```

```

Enter the elements of the array1 2 3 4 5
1 2 3 4 5
1 4 3 2 5
-----
Process exited after 9.592 seconds with return value 0
Press any key to continue . . .

```