LAB MANUAL 8

HOME TASKS

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TASK 1

```cpp
#include <iostream>

using namespace std;

int main()

{

        int i,x;

        double array[1000],sum(0),avg;

        cout<<"enter number of terms"<<endl;

        cin>>x;

        if(x<0){

                cout<<"enter a positive number"<<endl;

                cin>>x;

        }

        else{

                cout<<"enter the terms"<<endl;

                for(i=0;i<x;i++){

                        cin>>array[i];

                        sum+=array[i];

                }

                avg=sum/x;

                cout<<"average="<<avg<<endl;

        }

}
```

```
enter number of terms
5
enter the terms
2
4
6
8
10
average=6
```

TASK 2

```cpp
#include <iostream>
using namespace std;
int main() {
    int a[8] = {13, 15, 17, 9, 99, 77, 65, 43};
    int largest = a[0];
    int smallest = a[0];
    for (int i = 1; i < 8; ++i) {
        if (a[i] > largest) {
            largest = a[i];
        }
        if (a[i] < smallest) {
            smallest = a[i];
        }
    }
    cout<< "Largest element: "<< largest <<endl;
    cout<< "Smallest element: "<< smallest <<endl;
}
```
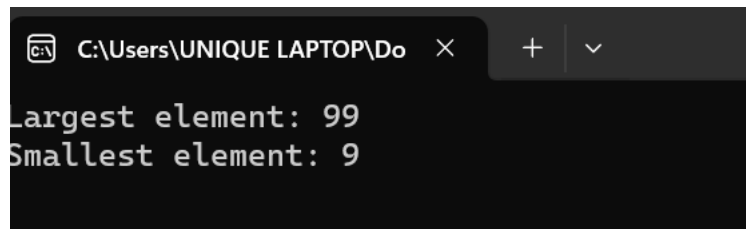
TASK 3

```cpp
#include <iostream>

using namespace std;

int main() {

    const int size = 5;

    int arr[size];

    cout<< "Enter 5 array elements:\n";

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

        cout<< "Enter element at position " << i << ": ";

        cin>> arr[i];

    }

    cout << "\nOriginal array:\n";

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

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

    }

    cout<<"\n";

    int temp = arr[2];

    arr[2] = arr[4];

    arr[4] = temp;

    cout<< "\nArray after swapping elements at positions 2 and 4:\n";

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

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

    }

    cout<<"\n";
```
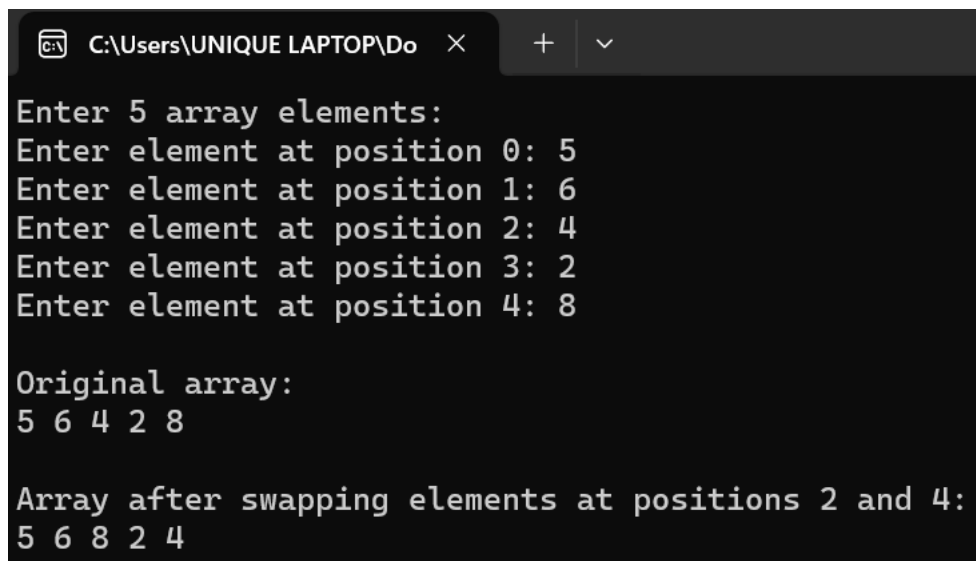
```
}
```

```
C:\Users\UNIQUE LAPTOP\Do    X    +    ∨

Enter 5 array elements:
Enter element at position 0: 5
Enter element at position 1: 6
Enter element at position 2: 4
Enter element at position 3: 2
Enter element at position 4: 8

Original array:
5 6 4 2 8

Array after swapping elements at positions 2 and 4:
5 6 8 2 4
```