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Lab Manual 8:

Lab task:

Task 1:

```cpp
#include <iostream>
using namespace std;
int main(){
    int n;
    float sum,avg;
    cout<<"Enter the number of elements you want in an array";
    cin>>n;
    int array[n];
    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<n; i++){
        sum= sum+array[i];
    }
    avg=sum/n;
    cout<<"The average of the numbers is"<<avg;
}
```

```
Enter the number of elements you want in an array 7
2
3
4
5
6
7
8
2 3 4 5 6 7 8
The average of the numbers is5
```

Task 2:

```cpp
#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++){
        for(int j=0; j<4-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<5; i++){
        cout<<array[i]<<" ";
    }
    return 0;
}
```

```
Enter the elements of the array 4
99
77
56
232
4 56 77 99 232
------------------------------
Process exited after 6.544 seconds with return value 0
Press any key to continue . . .
```

Task 3:

```cpp
#include <iostream>
using namespace std;
int main(){
    int i,j,min,temp;
    int array[5];
    cout<<"Enter the elements of the array";
    for(i=0; i<5; i++){
        cin>>array[i];
    }
    for( i=0; i<4; i++){
        min=i;
        for( j=i+1; j<5; j++){
            if(array[j]<array[min]){
                min=j;

            }

        }
        if(min!=i){
        temp=array[i];
        array[i]=array[min];
        array[min]=temp;
        }
        }
        for(i=0; i<5; i++){
            cout<<array[i];
        }
        return 0;
}
```

```
Enter the elements of the array44
99
77
2
0
0 2 44 77 99
------------------------------
Process exited after 4.768 seconds with return value 0
Press any key to continue . . .
```