Fundamentals of Programming

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LabTAsk 8

1.Code to find average of integers of an array.

```
include<iostream>

using namespace std;

int main()

{

        int n;

        int arr[n];

        float sum=0, avg;


        cout<<"Enter lenght of array :";

        cin>>n;


        cout<<"Enter integers in the array :";

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

                cin>>arr[i];

        }


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

                sum += arr[i];

        }
```
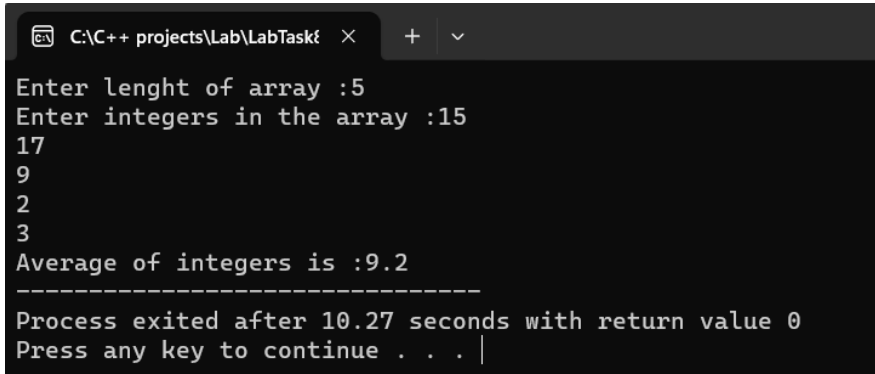
```
        avg = sum/n ;

        cout<<"Average of integers is :"<<avg;


        return 0;

}
```


2.Code to implement bubble sorting on an array of 6 integers.

```
{
    int arr[5];
    cout<<"Enter Integers in the array :";
    for(int i=0; i<5; i++){
        cin>>arr[i];
    }
    int temp=0;
    for(int i=0; i<5; i++){
        for(int j=0; j<4; j++ ){
            if(arr[j]>arr[j+1]){
                temp=arr[j];
                arr[j]=arr[j+1];
                arr[j+1]=temp;
```
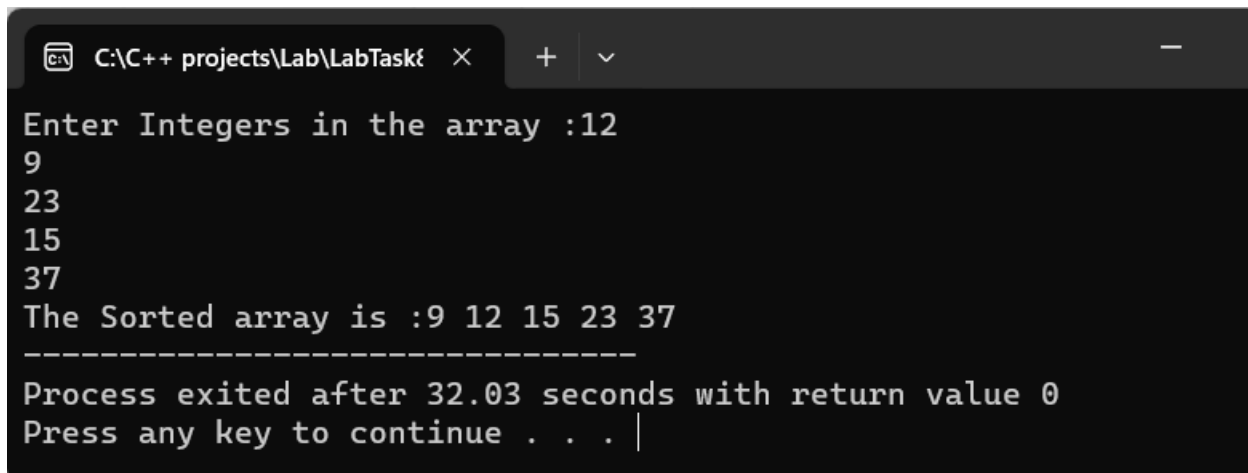
```cpp
                }
            }
        }
        cout<<"The Sorted array is :";
        for(int i=0; i<5; i++){
                cout<<arr[i] <<" ";
        }
        return 0;
}
```
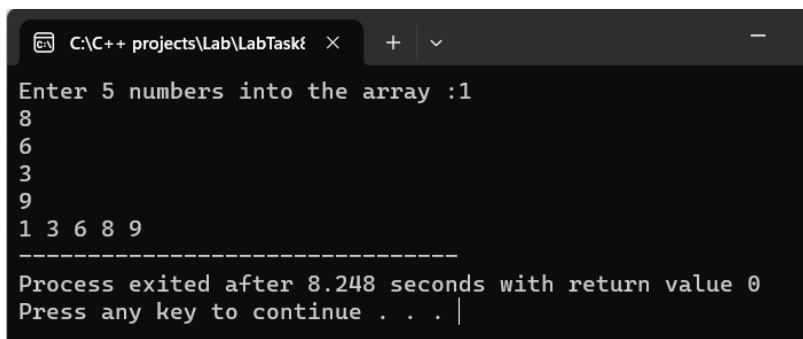
```
C:\C++ projects\Lab\LabTask8    ×    +    ∨                                    —

Enter Integers in the array :12
9
23
15
37
The Sorted array is :9 12 15 23 37
----------------------------------
Process exited after 32.03 seconds with return value 0
Press any key to continue . . .
```

3.Code to implement selection sorting on an array of 6 integers.

```cpp
{
    int arr[5];
    int min;
    cout<<"Enter 5 numbers into the array :";
    for(int i=0;i<5;i++){
        cin>>arr[i];
    }
    for (int i=0;i<5;i++){
        min=arr[i];
        for (int j=i;j<5;j++){
            if(min>arr[j]){
                min=arr[j];
                arr[j]=arr[i];
                arr[i]=min;
            }
        }
    }
    for(int i=0;i<5;i++){
        cout<<arr[i]<<" ";
    }
    return 0;
}
```

```
C:\C++ projects\Lab\LabTask8   ×      +   ∨                                    —

Enter 5 numbers into the array :1
8
6
3
9
1 3 6 8 9
----------------------------------
Process exited after 8.248 seconds with return value 0
Press any key to continue . . .
```