

LAB MANUAL 08

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Q 01 Write a C++ program to calculate average of numbers of array.

CODE:

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
    double num[10], sum = 0, avg;
```

```
    for(int i = 0; i < 10;i++) {
```

```
        cout << "Enter the " <<i+1<<" number: ";
```

```
        cin >> num[i];
```

```
        sum =sum+num[i];
```

```
    }
```

```
    avg = sum / 10;
```

```
    cout << "Average = " << avg;
```

```
    return 0;
```

```
}
```

Result:

```
Enter the 1 number: 32
Enter the 2 number: 3434
Enter the 3 number: 5465
Enter the 4 number: 65
Enter the 5 number: 23
Enter the 6 number: 2
Enter the 7 number: 5
Enter the 8 number: 86
Enter the 9 number: 453
Enter the 10 number: 23
Average = 958.8
-----
Process exited after 11.56 seconds with return value 0
Press any key to continue . . .
```

Q 02 Implement Bubble sort on an array of 5 integers.

CODE:

```
#include <iostream>
using namespace std;
int main() {
    int array[5], temp;

    cout << "Enter 5 integers for the array:" << endl;

    for (int i = 0; i < 5; i++) {
        cin >> array[i];
    }

    for (int i = 0; i < 5 - 1; i++) {
        for (int j = 0; j < 5 - i - 1; j++) {
            if (array[j] > array[j + 1]) {
```

```

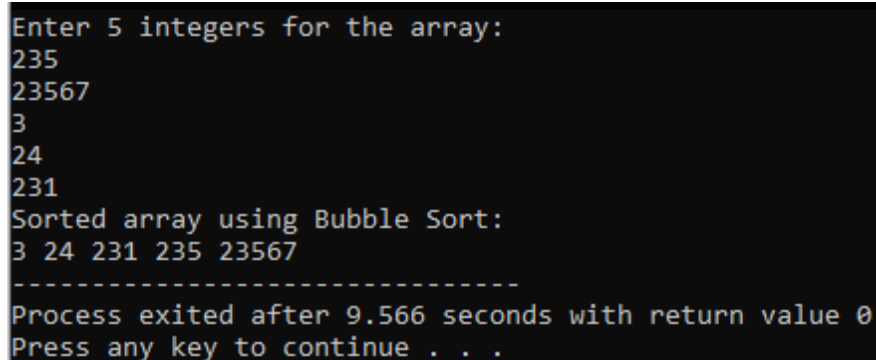
        temp=array[j];
        array[j]=array[j+1];
        array[j+1]=temp;
    }
}
}

cout << "Sorted array using Bubble Sort: "<<endl;
for (int i = 0; i < 5; i++) {
    cout << array[i] << " ";
}

return 0;
}

```

RESULT:



```

Enter 5 integers for the array:
235
23567
3
24
231
Sorted array using Bubble Sort:
3 24 231 235 23567
-----
Process exited after 9.566 seconds with return value 0
Press any key to continue . . .

```

Q 03 Implement Selection Sort on an array of 5 integers.

CODE

```

#include <iostream>

using namespace std;

```

```

int main() {
    int array[5], number, temp;
    for (int i = 0; i < 5; i++) {
        cout<<"Enter "<<i+1<<" number: ";
        cin>>number;
        array[i]=number;
    }
    for (int i = 0; i < 5-1; i++) {
        for (int j = i+1; j < 5; j++) {
            if (array[j]<array[i]){
                int temp=array[j];
                array[j]=array[i];
                array[i]=temp;
            }
        }
    }
    for (int i = 0; i < 5; i++) {
        cout<<array[i]<<" ";
    }
    return 0;
}

```

RESULT:

```
Enter 1 number: -65
Enter 2 number: 463
Enter 3 number: 67
Enter 4 number: 3456
Enter 5 number: 356
-65 67 356 463 3456
-----
Process exited after 7.122 seconds with return value 0
Press any key to continue . . .
```