

CS-114 – Fundamental of Programing

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LAB MANUAL #8

HOME TASK

ME 15 Section B

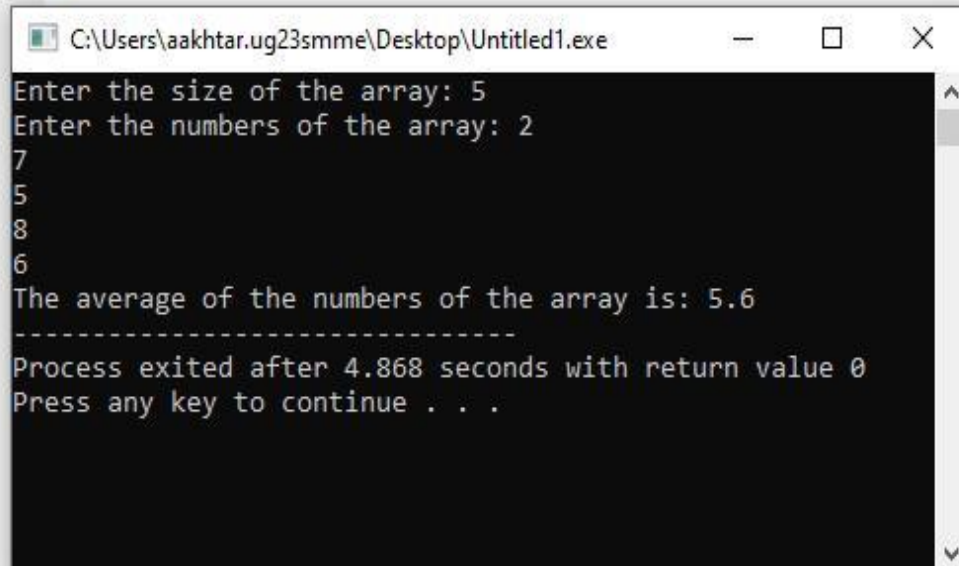
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TASK 1

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      float avg, sum=0.0f;
6      int i, size;
7      cout<<"Enter the size of the array: ";
8      cin>>size;
9      float a_1[size];
10     cout<<"Enter the numbers of the array: ";
11     for(i=0;i<size;i++)
12         cin>>a_1[i];
13
14     for(i=0;i<size;i++)
15         sum+=a_1[i];
16
17     avg= sum/size;
18     cout<<"The average of the numbers of the array is: "<<avg;
19 }
```



```
C:\Users\alakhtar.ug23smme\Desktop\Untitled1.exe
Enter the size of the array: 5
Enter the numbers of the array: 2
7
5
8
6
The average of the numbers of the array is: 5.6
-----
Process exited after 4.868 seconds with return value 0
Press any key to continue . . .
```

Task 2

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int i, j, size, temp;
6      cout<<"Enter the size of the array: ";
7      cin>>size;
8      int a_1[size];
9      cout<<"Enter the elements of the array: ";
10     for(i=0;i<size;i++)
11         cin>>a_1[i];
12
13     for(i=0;i<size;i++)
14     {
15         for(j=0;j<size-1;j++)
16         {
17             if(a_1[j+1]<a_1[j])
18             {temp=a_1[j];
19              a_1[j]=a_1[j+1];
20              a_1[j+1]=temp;}
21         }
22     }
23
24     cout<<"The array after bubble sort is: "<<endl;
25     for(i=0;i<size;i++)
26         cout<<a_1[i]<<endl;
27 }
```

C:\Users\aaakhtar.ug23smme\Desktop\Untitled2.exe

Enter the size of the array: 5
Enter the elements of the array: 12

56

34

98

78

The array after bubble sort is:

12

34

56

78

98

Process exited after 6.368 seconds with return value 0

Press any key to continue . . .

Compile Log Debug Find Results Close

Task 3

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int i, j, size, temp, min;
6      cout<<"Enter the size of the array: ";
7      cin>>size;
8      int a[size];
9      cout<<"Enter the elements of the array: ";
10     for(i=0;i<size;i++)
11         cin>>a[i];
12
13     for(i=0;i<size;i++)
14     {
15         min=a[i];
16         for(j=i+1;j<size;j++)
17         {
18             if(a[j]<min)
19             {min=a[j];
20              a[j]=a[i];
21              a[i]=min;}
22         }
23     }
24     cout<<"the array after selection sort is: "<<endl;
25     for(i=0;i<size;i++)
26         cout<<a[i]<<endl;
27 }
28
```

C:\Users\alakhtar.ug23smme\Desktop\Untitled3.exe

```
Enter the size of the array: 5
Enter the elements of the array: 6
13
12
15
21
the array after selection sort is:
6
12
13
15
21
-----
Process exited after 10.76 seconds with return value 0
Press any key to continue . . .
```

- Errors: 0