

Fundamentals of Programming

Lab Task: 8

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Task:1

Code:

```
#include <iostream>
using namespace std;
int main(){
    int n;
    cout<<"Enter length of Array"<<endl;
    cin >> n;
    float arr[n],sum=0,average=0;
    cout<<"Enter integers: ";
    for(int i=0;i<n;i++)
    {cin>>arr[i]; }
    for (int i=0;i<n;i++)
    { cout<<arr[i]<<" ";
      sum=sum+arr[i];
    }
    average=sum/n;
    cout<<endl;
    cout<<"Mean is:"<<average;
    return 0;
}
```

Output:

Compile Result

```
Enter length of Array
6
Enter integers: 4
5
5
6
6
7
455667
Mean is:5.5
[Process completed - press Enter]
```

Task: 2

Code:

```
#include <iostream>
using namespace std;
int main() {
    int n=5, arr[n], temp;
    cout<<"Enter five numbers"<<endl;
    for(int i=0; i<n; i++){

        cin>>arr[i];
    }
    for(int i=0; i<n-1; i++){
        for(int j=0; j<=n-2; j++){
            if(arr[j]>arr[j+1]){
                temp=arr[j];
                arr[j]=arr[j+1];
                arr[j+1]=temp;
            }
        }
    }
    for(int i=0; i<n; i++){
        cout<<"["<<arr[i]<<"]"<<" ";
    }

    return 0;
}
```

Output:

Compile Result

```
Enter five numbers
1
5
3
6
9
[1][3][5][6][9]
[Process completed - press Enter]
```

Task: 3

Code:

```
#include <iostream>
using namespace std;
int main() {
    int n=5, arr[n], temp;
    cout<<"Enter five numbers"<<endl;
    for(int i=0; i<n; i++){

        cin>>arr[i];
    }
    for(int i=0; i<n; i++){
        for(int j=i; j<n; j++){
            if(arr[j]<arr[i]){
                temp=arr[j];
                arr[j]=arr[i];
                arr[i]=temp;
            }
        }
    }
    for(int i=0; i<n; i++){
        cout<<"["<<arr[i]<<"]"<<" ";
    }

    return 0;
}
```

Output:

Compile Result

```
Enter five numbers
1
5
6
28
4
[1][4][5][6][28]
[Process completed - press Enter]
```

