

//Java program for an Array using all functions with Method and Object

```
import java.util.Scanner;
```

```
class MyArrMeth{
```

```
    void displayArr(int[] a){//meth-1
```

```
        for(int i=0;i<a.length;i++){
            System.out.println("a["+i+"]: "+a[i]);
        }
    }//meth-1-----
```

```
    int[] bubbleSort(int[] a){//meth-2 bubble
```

```
        int temp;
        for(int i=0;i<a.length;i++){
            for(int j=0;j<a.length-1;j++){
                if(a[j]>a[j+1]){
                    temp=a[j];
                    a[j]=a[j+1];
                    a[j+1]=temp;
                }
            }
        }
    }
```

```
        return a;
```

```
    }//meth-2 bubble sort-----
```

```
    int searchArr(int[] a,int ele){//linear search
```

```
        int i=0;
        for(i=0;i<a.length;i++){
            if(a[i]==ele){
                return i;
            }
        }
    }
```

```
        return -1;
```

```
    }//meth-3
```

```
    int sumArr(int[] a){//meth-3-----
```

```
        int sum=0;
```

```
        /*write
```

```
        * missing
```

```
        * code to find sum of all array elements
```

```
        */
```

```
        return sum;
```

```
    }//meth-4
```

```
    double avgArr(int[] a){//meth-4-----
```

```
        double avg=0.0;
```

```
        /*write the
```

```
        * missing
```

```
        * code to find avg of all array elements
```

```
        */
```

```
        return avg;
```

```
    }//meth-4
```

```
}
```

```
public class MyMainClass {
```

```
    public static void main(String[] args) {
```

```
        Scanner sc=new Scanner(System.in);
```

```
        int[] a=new int[5];
```

```
        System.out.println("len="+a.length);
```

```
        for(int i=0;i<a.length;i++){
```

```
            System.out.print("enter a["+i+"]: ");
```

```
            a[i]=sc.nextInt();
```

```
        }
```

```
        MyArrMeth arm=new MyArrMeth();
```

```
        arm.displayArr(a);//call meth-1
```

```
        //bubble sort
```

```
        arm.bubbleSort(a);//call meth-2
```

```
        System.out.println("bubble sort:");
```

```
        arm.displayArr(a);//call meth-1
```

```
        //search
```

```
        System.out.print("enter a element to search:");
```

```
        int ele=sc.nextInt();
```

```
        int index=arm.searchArr(a, ele);//call meth-3
```

```
        System.out.println(ele+" found at index:"+index);
```

```
        int sum=arm.sumArr(a);//call meth-4
```

```
        //System.out.println("sum="+arm.sumArr(a));
```

```
        /*write the missing code to call avgArr() */ //call meth-5
```

```
    }
}
```