```java
package BasicJava.Assignment6;

public class AddArrayElements {
    public static void main(String[] args) {
        int[] arr = {4,3,2,1};
        int sum = 0;
        for(int i=0;i<arr.length;i++){
            sum=sum+arr[i];
        }
        System.out.println("The sum of all elements = "+sum);
    }
}
```

OUTPUT:

```
The sum of all elements = 10

Process finished with exit code 0
```

```java
package BasicJava.Assignment6;

public class MaxElement {
    public static void main(String[] args) {
        int[] arr = {4,3,18,2,1,13,6};

        int max=0;
        int first=arr[0];
        int next=arr[1];
        if (first<next){
            max=next;
        }
        else{
            max=first;
        }
        for(int i=2;i<=(arr.length-1);i++) {

            if (max<arr[i]){
                max=arr[i];
            }
        }
        System.out.println("The maximum element in the array is "+max);
    }
}
```

OUTPUT:

```
The maximum element in the array is 18

Process finished with exit code 0
```

```java
package BasicJava.Assignment6;

public class UniqueElement {
    public static void main(String[] args) {
        int[] arr = {2,3,9,2,1,3,5,9};

        for(int i=0;i<arr.length;i++){
            int count = 0;
            for(int j=0;j<arr.length;j++){
                if(arr[i]==arr[j])
                        count++;
            }
            if (count==1){
                System.out.println(arr[i]);
            }
        }

    }
}
```

OUTPUT:

```
1
5

Process finished with exit code 0
```

```java
public class EvenElement {
    public static void main(String[] args) {
        int[] arr = {3,8,9,5,12};

        for(int a:arr){
           if(a%2==0)
            System.out.println(a);
        }
    }

}
```

```
8
12

Process finished with exit code 0
```

```java
package BasicJava.Assignment6;

public class LongPalindrome {
    public static void main(String[] args) {
        String palindrome = "malayalam";
        isPalindrome(palindrome);
    }
    public static void isPalindrome(String str){
        String answ = "thing";
        for(int i=3; i<=str.length();i++){
            for(int f=0; f<=(str.length()-i);f++){
                String temp1 = str.substring(f, f+i);
                String temp2 = reverse(temp1);
                if (temp1.equalsIgnoreCase(temp2)){
                    answ = temp1;
                }
            }
        }
        System.out.println("The biggest palindrome is " + answ);
    }
    public static String reverse(String inp){
        StringBuffer sb = new StringBuffer(inp);
        String ans = sb.reverse().toString();
        return ans;
    }
}
```

OUTPUT:

```
The biggest palindrome is malayalam

Process finished with exit code 0
```

```java
package BasicJava.Assignment6;
public class FreqChar {
    public static void main(String[] args) {
        String str ="programming";
        char[] ch=str.toCharArray();
        String letrs ="abcdefghijklmnopqrstuvwxyz";
        char[] ch1= letrs.toCharArray();
        int[] counter={0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0};
        for(char c: ch) {
            for (char h : ch1) {
                if(c==h){
                    counter[convrt(c, ch1)]++;
                }
            }
        }
        for(int i=0;i<counter.length;i++){
            if(counter[i]>0){
                System.out.println("Letter " + ch1[i] + " is present " + counter[i] + " times.");
            }
        }
    }
    public static int convrt(char letr, char[] dict){
        int count=0;
        for(char ch: dict){
            count++;
            if(letr==ch){
                return count-1;
            }
        }
    }
    return 0;
}
```

OUTPUT:

```
Letter a is present 1 times.
Letter g is present 2 times.
Letter i is present 1 times.
Letter m is present 2 times.
Letter n is present 1 times.
Letter o is present 1 times.
Letter p is present 1 times.
Letter r is present 2 times.
```