

[[[1]]]

```
import java.util.Scanner;
public class Task1 {
    public static void main(String [] args) {

        Scanner input = new Scanner(System.in);
        System.out.print("Enter array size : ");
        int size = input.nextInt();
        System.out.print("Enter array elements : ");

        int [] array = new int [size];
        for(int i = 0 ; i < size ; i++) {
            array[i] = input.nextInt();
        }
        input.close();

        int [] rev = new int [size];
        rev = reverseArray (array,size);
        System.out.print("Reverse array : ");
        printArray(rev,size);
    }
    public static int[] reverseArray (int [] arr,int size) {
        int [] reverse = new int [size];
        for(int i = 0 , j = size -1 ; i < size ; i++ , j--) {
            reverse[j] = arr[i] ;
        }
        return reverse ;
    }
    public static void printArray (int [] arr , int size) {
        for(int i = 0 ; i < size ; i++) {
            System.out.print(arr[i]+ " ");
        }
    }
}
```

[[[2]]]

```
import java.util.Scanner;
public class Task2 {
    public static void main(String[] args) {

        Scanner input = new Scanner (System.in);
        int size = 0 , inputElement ;
        int [] arr = new int [100] ;
        System.out.print("Enter array elements [positive] : ");
        do {
            inputElement = input.nextInt();
            arr[size] = inputElement ;
            size++;
        } while(inputElement!=0);

        input.close();
    }
}
```

```

        countOccurence(arr,size-1);
    }
    public static void countOccurence(int [] Arr , int size) {
        for(int i = 1 ; i <= 100 ; i++) {
            int count = 0 ;
            for(int j = 0 ; j < size ; j++) {
                if(Arr[j] == i) {
                    count++ ;
                }
            }
            if(count!= 0) {
                System.out.println(i+" occurs " +count+ " times");
            }
        }
    }
}
[[[3]]]
import java.util.Scanner;
public class Task3 {
    public static void main(String [] args) {

        Scanner input = new Scanner (System.in);
        int [] array = new int [10];
        int count = 0 , number ;
        System.out.print("Enter array elements : ");

        for(int i = 0 ; i < 10 ; i++) {
            number = input.nextInt();

            if(isDistinct(array,number)) {
                array[count] = number ;
                count++ ;
            }
        }
        System.out.println("Total distinct numbers : " +count);
        System.out.print("Distinct numbers : ");

        for(int i = 0 ; i < array.length ; i++) {
            if(array[i] > 0) {
                System.out.print(" " +array[i]);
            }
        }

    }
    public static boolean isDistinct (int [] arr , int num) {
        for(int i = 0 ; i < arr.length ; i++) {
            if(num == arr[i]) {
                return false ;
            }
        }
        return true ;
    }
}

```

```

    }
}
[[[4]]]
public class Task4 {
    public static void main (String[] args) {

        final int NUMBEROFPRIMES = 50 ;
        int number = 3 ;
        boolean flag = true ;

        System.out.print("First " +NUMBEROFPRIMES+ " prime numbers are : 2
");
        for(int i = 2 ; i < NUMBEROFPRIMES ; ) {
            for(int j = 2 ; j < Math.sqrt(number) ; j++) {

                if(number % j == 0) {
                    flag = false ;
                    break ;
                }
            }
            if(flag) {
                System.out.print(number+ " ");
                i++ ;
            }
            number++ ;
            flag = true ;
        }
    }
}

```

```

}
[[[5]]]
public class Task5 {
    public static void main(String[] args) {

        int [] arr = new int [100] ;
        int [] digits = new int [10] ;
        int count = 0 ;

        for(int i = 0 ; i < 100 ; i++) {
            arr[i] = (int)(Math.random()*10) ;
        }

        for(int i = 0 ; i < 10 ; i++) {
            for(int j = 0 ; j < 100 ; j++) {
                if(i == arr[j]) {
                    count++ ;
                }
            }
            digits[i] = count ;
            System.out.println(i+ " found " +digits[i]+ " times.");
            count = 0 ;
        }
    }
}

```

```

    }
}
[[[6]]]
import java.util.Scanner ;
public class Task6 {
    public static void main(String[] args) {

        Scanner input = new Scanner (System.in);
        System.out.print("Enter array size : ");
        int size = input.nextInt();

        double [] arr = new double [size];
        System.out.print("Enter array elements : ");
        for(int i = 0 ; i < size ; i++) {
            arr[i] = input.nextDouble();
        }
        System.out.println("Average of the array elements are : "
+average(arr));
    }
    public static int average (int [] array) {
        int sum = 0 ;
        for(int i = 0 ; i < array.length ; i++) {
            sum+= array[i] ;
        }
        return sum / array.length ;
    }
    public static double average (double [] array) {
        double sum = 0 ;
        for(int i = 0 ; i < array.length ; i++) {
            sum+= array[i] ;
        }
        return sum / array.length ;
    }
}

```

```

[[[7]]]
import java.util.Scanner ;
public class Task7 {
    public static void main(String[] args) {

        Scanner input = new Scanner (System.in);
        System.out.print("Enter array size : ");
        int size = input.nextInt();
        int [] arr = new int [size] ;

        System.out.print("Enter elements : ");
        for(int i = 0 ; i < size ; i++) {
            arr[i] = input.nextInt();
        }
        System.out.println(isSorted(arr)? "List is sorted" : "List is not

```

```

sorted.");
    }
    public static boolean isSorted (int [] List) {

        for(int i = 0 ; i < List.length-1; i++) {
            if(List[i] > List[i+1]) {
                return false ;
            }
        } return true ;
    }
}
[[[8]]]
import java.util.Scanner ;
public class Task8 {
    public static void main(String[] args) {

        Scanner input = new Scanner (System.in);
        System.out.print("Enter array1 size : ");
        int size1 = input.nextInt();
        int [] arr1 = new int [size1] ;

        System.out.print("Enter array2 size : ");
        int size2 = input.nextInt();
        int [] arr2 = new int [size2] ;

        System.out.print("Enter first array elements : ");
        for(int i = 0 ; i < size1 ; i++) {
            arr1[i] = input.nextInt();
        }
        System.out.print("Enter second array elements : ");
        for(int i = 0 ; i < size2 ; i++) {
            arr2[i] = input.nextInt();
        }
        System.out.println(equals(arr1,arr2)? "Lists are identical" : "List
are not identical");
    }
    public static boolean equals (int [] List1 , int [] List2) {

        if(List1.length != List2.length) {
            return false ;
        }
        for(int i = 0 ; i < List1.length ; i++) {
            if(List1[i] != List2[i]) {
                return false ;
            }
        } return true ;
    }
}
[[[9]]]
import java.util.Scanner ;

```

```

public class Task9 {
    public static void main(String [] args) {

        Scanner input = new Scanner (System.in);
        System.out.print("Enter the number of values : ");
        int size = input.nextInt();
        int [] arr = new int [size];

        System.out.print("Enter values : ");
        for(int i = 0 ; i < size ; i++) {
            arr[i] = input.nextInt();
        }
        System.out.println(isConsecutiveFour(arr)? "List has consecutive
four" : "List has no consecutive four");
    }
    public static boolean isConsecutiveFour(int [] values) {
        for(int i = 0 ; i < values.length-1 ; i++) {
            if(values[i] == values[i+1] &&
                values[i] == values[i+2] &&
                values[i] == values[i+3] ) {
                return true ;
            }
        }
        return false ;
    }
}

```