Q1) Accept an array and find the Sum of even and odd indices :

```java
import java.util.Scanner;
class Main{
    public static void main(String[] args){
    Scanner ss = new Scanner(System.in);
    System.out.println("Number of elements to be stored in an array");
    int n=ss.nextInt();
    int array[]=new int[n];
    int even=0;
    int odd=0;
    System.out.println("Enter the elements");
    for(int i=0;i<n;i++){
        array[i]=ss.nextInt();
        if(i%2==0){
            even+=array[i];
        }
        else
            odd+=array[i];
    }
    System.out.println("Sum of Even Indices is:"+even+" And of Odd Indices  is:"+odd);
    }
}
```

Output:

```
Number of elements to be stored in an array
5
Enter the elements
5
9
6
4
12
Sum of Even Indices is:23 And of Odd Indices  is:13
```

//Q2) Accept an array and find the count of positive , negative and zeros in a given array

```java
import java.util.Scanner;
class Main{
    public static void main(String[] args){
    Scanner ss = new Scanner(System.in);
    System.out.println("Number of elements to be stored in an array");
    int n=ss.nextInt();
    int array[]=new int[n];
    int countPos=0;
    int countNeg=0;
    int countZero=0;
    System.out.println("Enter the elements");
    for(int i=0;i<n;i++){
        array[i]=ss.nextInt();
        if(array[i]>0)
            countPos++;
        else if(array[i]<0)
            countNeg++;
        else countZero++;
    }
    System.out.println("Count of possitive num is:"+countPos+" \n Count of Negative num is:"+countNeg+"\n Count of Zeroes is:"+countZero);
    }
}
```

```
Number of elements to be stored in an array
5
Enter the elements
56
-7
0
36
-5
Count of possitive num is:2
 Count of Negative num is:2
 Count of Zeroes is:1
```

//Q3) Super market bill:

```java
import java.util.Scanner;
class Main{
    public static void main(String[] args) {
    Scanner ss = new Scanner(System.in);
    System.out.println("Number of different items purchased");
    int n=ss.nextInt();
    double rate[]=new double[n];
    int quantity[]=new int[n];
    double sum=0;
    double grandTotal;
    System.out.println("Enter the Details");
    for(int i=0;i<n;i++){
        System.out.println("Enter the product:"+(i+1)+" Rate");
        rate[i]=ss.nextDouble();
        System.out.println("product:"+(i+1)+"Quantity");
        quantity[i]=ss.nextInt();
        sum=sum+(rate[i]*quantity[i]);
        }
    grandTotal=sum;
    if(sum>=10000){
        sum=(sum*0.95);
    }
    else if(sum>=7500&&sum<10000){
        sum=(sum*0.97);
    }
    else if(sum>=5000){
```

```
      sum=(sum*0.98);

   }

   System.out.println("Total bill amount:"+grandTotal+"\n After Discount Amount to be paid is: "+sum);

}

}
```

```
Number of different items purchased
3
Enter the Details
Enter the product:1  Rate
500
product:1Quantity
10
Enter the product:2  Rate
250
product:2Quantity
5
Enter the product:3  Rate
23.36
product:3Quantity
32
Total bill amount:6997.52
 After Discount Amount to be paid is: 6857.569600000001


...Program finished with exit code 0
Press ENTER to exit console.
```

//Q4) Bigg array to small arrays distrubutions:

```java
import java.util.Scanner;

public class Main {

    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.println("Number of elements to be entered:");
        int num = input.nextInt();
        int a[] = new int[num];
        int b[] = new int[num];
        int value,j=0,k=0;
        System.out.println("ENTER THE ELEMENTS:");
        for(int i=0;i<num;i++){
            value = input.nextInt();
            if(value%2==0) {
                a[j]=value;
                j++;
            }else {
                b[k]=value;
                k++;
            }
        }
        int sum=0;
        int small=a[0];
        int big = a[0];
        for(int i=0;i<j;i++){
            sum+=a[i];
            if(small>a[i]) {
```

```java
                        small = a[i];

                }

                if(big<a[i]) {

                        big = a[i];

                }

        }

        System.out.println("\nElements of array B are:");

        for(int q=0;q<k;q++) System.out.print("\t"+b[q]);

        System.out.println("\nElements of array C are:");

        for(int p=0;p<j;p++) System.out.print("\t"+a[p]);

        System.out.println("\nSum of all integers in C "+sum);

        System.out.println("Average of all integers in C "+(double)sum/k);

        System.out.println("Smallest integer in C "+small);

        System.out.println("Largest integer in C "+big);

    }

}
```

Output:

```
Number of elements to be entered:
6
ENTER THE ELEMENTS:
1  2  3  4  5  6

Elements of array B are:
        1        3        5
Elements of array C are:
        2        4        6
Sum of all integers in C 12
Average of all integers in C 4.0
Smallest integer in C 2
Largest integer in C 6


...Program finished with exit code 0
Press ENTER to exit console.
```