

Write A program to find the Sum of elements at even indices and elements at odd indices

```
import java.lang.*;
import java.util.*;
import java.io.*;
public class extra1
{
    private static int[] a;
    private static int n;
    public static void read()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the Number Of Elements of array");
        n=sc.nextInt();
        a=new int[n];
        System.out.println("Enter the elements of Array");
        for(int i=0;i<n;i++)
        {
            a[i]=sc.nextInt();
        }
    }
    public static void calc()
    {
        read();
        double sum_even=0;
        double sum_odd=0;
        for(int i=0;i<n;i+=2)
        {
            sum_even+=a[i];
        }
    }
}
```

```

        for(int i=1;i<n;i+=2)
        {
            sum_odd+=a[i];
        }

        System.out.println("Sum Of Numbers At Even Position is " + sum_even);
        System.out.println("Sum Of Numbers At Odd Position is " + sum_odd);
    }

    public static void main(String[] args)
    {
        calc();
    }
}

```

OUPUT:

```

Microsoft Windows [Version 10.0.18362.1082]
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C:\Users\Shreehari Kulkarni>set path="C:\Program Files\Java\jdk-14.0.2\bin"
C:\Users\Shreehari Kulkarni>cd desktop
C:\Users\Shreehari Kulkarni\Desktop>cd JAVALABPROGRAMS
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>javac extral.java
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>java extral
Enter the Number Of Elements of array
5
Enter the elements of Array
1
2
3
4
5
Sum Of Numbers At Even Position is 9.0
Sum Of Numbers At Odd Position is 6.0
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>

```

2 Write A program to count No of positive ,negative and zeroes in the array

```

import java.io.*;

import java.util.*;

```

```

public class extra2
{
    private static int[] n;
    private static int c_pos=0;
    private static int c_neg=0;
    private static int c_zer=0;
    public static void main(String[] args)
    {
        int size;

        Scanner sc=new Scanner(System.in);

        System.out.println("Enter The Number Elements Of Array");
        size=sc.nextInt();
        n=new int[size];

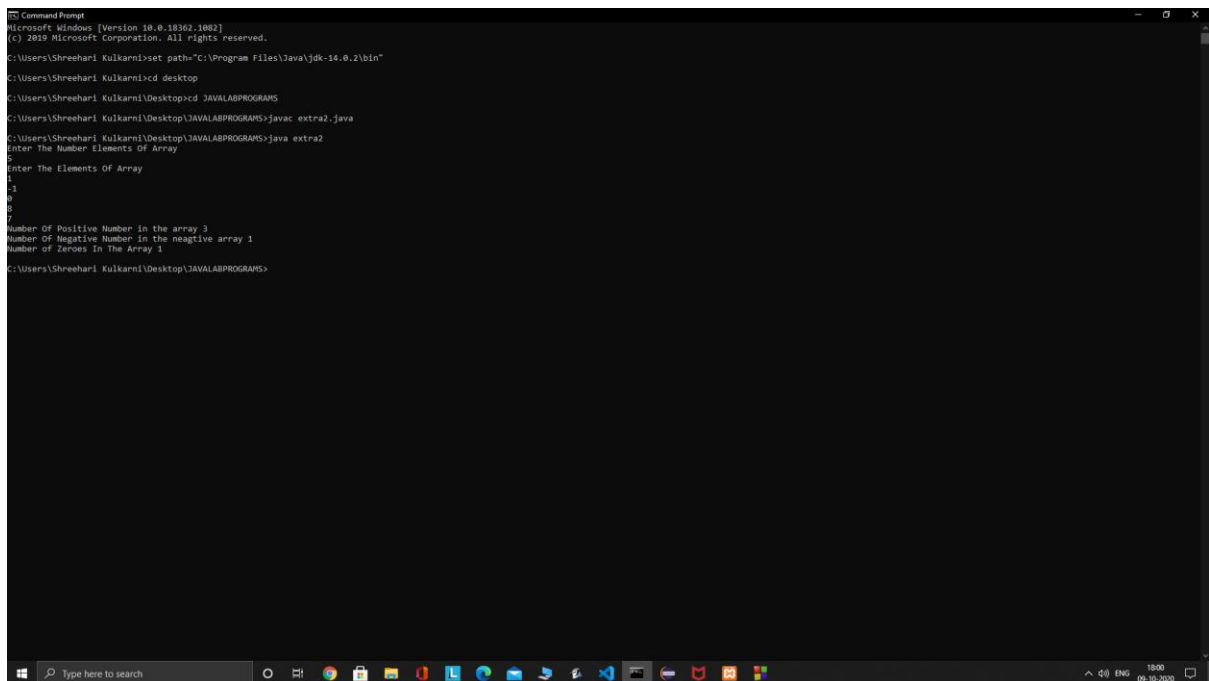
        System.out.println("Enter The Elements Of Array");
        for(int i=0;i<size;i++)
        {
            n[i]=sc.nextInt();
        }
        for(int i=0;i<size;i++)
        {
            if(n[i]>0)
                c_pos++;
            else if(n[i]<0)
                c_neg++;
            else
                c_zer++;
        }

        System.out.println("Number Of Positive Number in the array " + c_pos);
        System.out.println("Number Of Negative Number in the neagative array " + c_neg);
        System.out.println("Number of Zeroes In The Array " + c_zer);
    }
}

```

```
}
```

OUTPUT:



```
Command Prompt
Microsoft Windows [Version 10.0.18362.1002]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Shreehari Kulkarni>set path="C:\Program Files\Java\jdk-14.0.2\bin"
C:\Users\Shreehari Kulkarni>cd desktop
C:\Users\Shreehari Kulkarni\Desktop>cd JAVAABPROGRAMS
C:\Users\Shreehari Kulkarni\Desktop\JAVAABPROGRAMS>javac extra2.java
C:\Users\Shreehari Kulkarni\Desktop\JAVAABPROGRAMS>java extra2
Enter The Number Elements Of Array
5
Enter The Elements Of Array
1
1
0
8
7
Number Of Positive Number in the array 3
Number Of Negative Number in the neagative array 1
Number of Zeroes In The Array 1
C:\Users\Shreehari Kulkarni\Desktop\JAVAABPROGRAMS>
```

3: Program to calculate the bill

```
import java.io.*;

import java.util.*;

public class extra3
{
    private static double[] r_item;

    private static int[] quan;

    private static int item;

    public static void read()
    {
        Scanner sc=new Scanner(System.in);

        System.out.println("Enter the number of item");

        item=sc.nextInt();
```

```

r_item=new double[item];
quan=new int[item];
System.out.println("Enter the Rate Per Item of "+ item +"items ");
for(int i=0;i<item;i++)
{
    System.out.println("Enter the per item cost of item: " + (i+1));
    r_item[i]=sc.nextDouble();
}
System.out.println("Enter the Number Of Item purchased ");
for(int i=0;i<item;i++)
{
    System.out.println("Enter The Quantity Of item: " + (i+1) + " Purchased ");
    quan[i]=sc.nextInt();
}
}
public static double calc()
{
    read();
    double bill=0;
    double disc;
    for(int i=0;i<item;i++)
    {
        // System.out.println(quan[i]);
        bill+=r_item[i]*quan[i];
    }
    System.out.println("Total Bill Without Discount is " + bill);
    if(bill>=10000)
    {
        disc=((5*bill)/(100));
        System.out.println("Discount Given is " + disc);
        bill=bill-disc;
    }
}

```

```

        return bill;
    }
    if(bill>=7500&&bill<10000)
    {
        disc=((3*bill)/(100));
        System.out.println("Discount given is " + disc);
        bill=bill-disc;
        return bill;
    }
    if(bill>=5000&&bill<7500)
    {
        disc=((2*bill)/(100));
        System.out.println("Discount given is " + disc);
        bill=bill-disc;
        return bill;
    }
    System.out.println("Sorry No Discount Can Be Given");
    return bill;

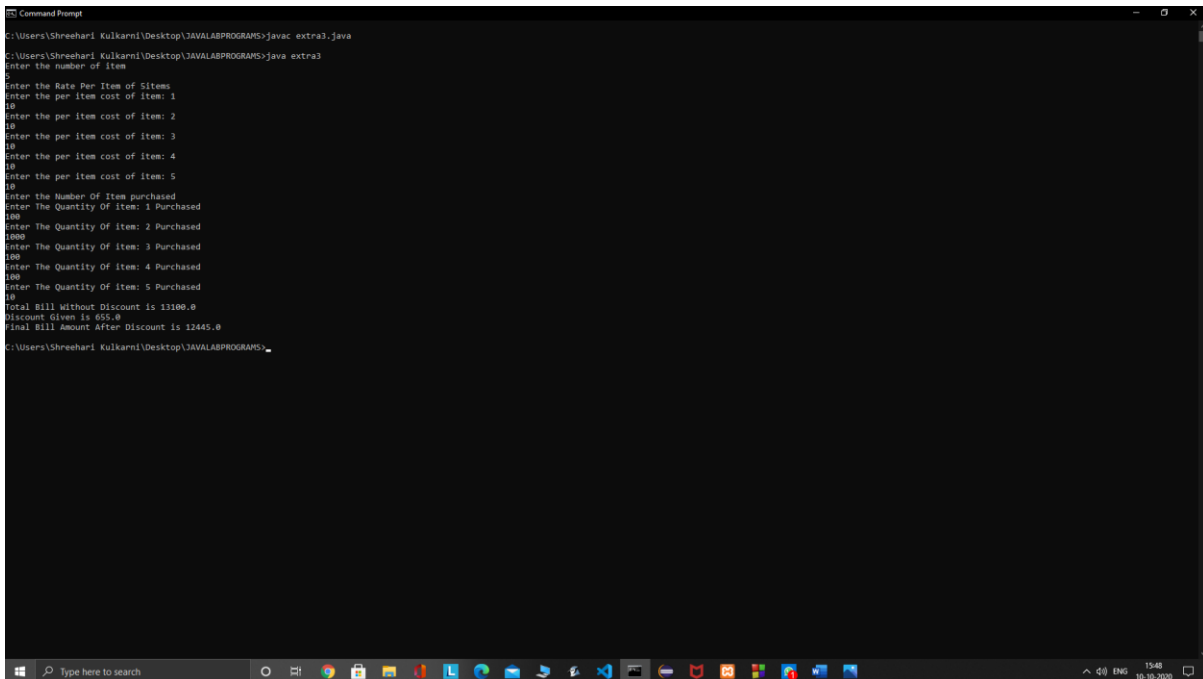
}

public static void main(String[] args)
{
    double bill=calc();
    System.out.println("Final Bill Amount After Discount is " + bill);
}

}

```

OUTPUT:



```
Command Prompt
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>javac extra3.java
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>java extra3
Enter the number of Item
5
Enter the Rate Per Item of 5 Items
Enter the per item cost of item: 1
10
Enter the per item cost of item: 2
10
Enter the per item cost of item: 3
10
Enter the per item cost of item: 4
10
Enter the per item cost of item: 5
10
Enter the Number Of Item purchased
Enter The Quantity Of item: 1 Purchased
100
Enter The Quantity Of item: 2 Purchased
100
Enter The Quantity Of item: 3 Purchased
100
Enter The Quantity Of item: 4 Purchased
100
Enter The Quantity Of item: 5 Purchased
10
Total Bill Without Discount is 13100.0
Discount Given is 605.0
Final Bill Amount After Discount is 12445.0
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>
```

4: PROGRAM TO SPLIT THE GIVEN ARRAY INTO TWO ARRAY B AND C B WHICH HAS ALL THE ODD NUMBERS AND C WHICH HAS ALL THE EVEN NUMBERS, TO FIND MAX AND MIN ELEMENT OF ARRAY C  
CALCULATE SUM, AVERAGE OF ALL ELEMENTS IN ARRAY C

```
import java.util.*;
import java.io.*;

public class extra4
{
    private static int[] a;
    private static int[] b;
    private static int[] c;
    private static int n;

    public static void read()
    {
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the number of elements in an array");

        n = sc.nextInt();
```

```
a=new int[n];  
System.out.println("Enter the elements of array");  
for(int i=0;i<n;i++)  
{  
    a[i]=sc.nextInt();  
}  
}  
public static int count_even()  
{  
    int count=0;  
    for(int i=0;i<n;i++)  
    {  
        if(a[i]%2==0)  
        {  
            count++;  
        }  
    }  
    return count;  
}  
public static int count_odd()  
{  
    int count=0;  
    for(int i=0;i<n;i++)  
    {  
        if(a[i]%2!=0)  
        {  
            count++;  
        }  
    }  
    return count;  
}
```



```
public static int[] diff()
{
    int k1=0;
    int k2=0;
    read();
    int c1=count_even();
    int c2=count_odd();
    b=new int[c2];
    c=new int[c1];
    System.out.println(c1);
    System.out.println(c2);
    for(int i=0;i<n;i++)
    {
        if((a[i]%2)==0)
        {
            c[k1]=a[i];
            k1++;
        }
        if(a[i]%2!=0)
        {
            b[k2]=a[i];
            k2++;
        }
    }
    System.out.println("Contents Of Array With All Odd numbers is ");
    for(int i=0;i<b.length;i++)
    {
        if(b[i]!=0)
            System.out.println(b[i]);
    }
}
```

```

        else
            break;
    }
    System.out.println("Contents Of Array With All Even Numbers is ");
    for(int i=0;i<c.length;i++)
    {
        if(c[i]!=0)
            System.out.println(c[i]);
        else
            break;
    }
    return c;
}

public static void calc()
{
    int[] array=diff();
    double sum=0;
    double average;
    int max=array[0];
    int min=array[0];
    for(int i=0;i<array.length;i++)
    {
        if(array[i]>max)
        {
            max=array[i];
        }
        if(array[i]<min)
        {
            min=array[i];
        }
        sum+=array[i];
    }
}

```

```

    }

    average=(((sum))/(array.length));

    System.out.println("*****Displaying the contents Of Array With Even
Numbers*****");

    System.out.println("Sum Of All Numbers Of An Array is " + sum);

    System.out.println("Average Of " + " " + array.length + " Numbers is " + average);

    System.out.println("Maximum Element in the array is " + max);

    System.out.println("Minimum Element in the array is " + min);

}

public static void main(String[] args)

{

    calc();

}

}

```

## OUTPUT:

```

C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>java extrat4.java
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>java extrat4
Enter the number of elements in an array
5
Enter the elements of array
1
2
3
4
5
Contents Of Array With All Odd numbers is
1
3
5
Contents Of Array With All Even Numbers is
2
4
*****Displaying the contents Of Array With Even Numbers*****
Sum Of All Numbers Of An Array is 15
Average Of 5 Numbers is 3.0
Maximum Element in the array is 5
Minimum Element in the array is 1
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>

```

