

## EXTRA PROGRAMS → WEEK 3.

1. Sum of even and odd indices of array.

```
⇒ import java.util.Scanner;
import java.util.Arrays;
public class Main
{
    public static void main(String[] args)
    {
        int sume = 0, sumo = 0;
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter the length of the array:");
        int n = scan.nextInt();
        System.out.println("Enter the elements of array:");
        int[] arr = new int[n];

        for (int i = 0; i < n; i++) {
            arr[i] = scan.nextInt();
        }

        System.out.print("Sum of odd indices: ");
        for (int i = 0; i < n; i = i + 2)
            sumo = sumo + arr[i];
        System.out.print(sumo + " ");

        System.out.print("Sum of even indices: ");
        for (int i = 1; i < n; i = i + 2)
            sume = sume + arr[i];
        System.out.print(sume + " ");
    }
}
```

```
1 import java.util.Scanner;
2 import java.util.Arrays;
3 public class Main
4 {
5     public static void main(String[] args)
6     {
7         int sume=0, sumo=0;
8         Scanner scan = new Scanner(System.in);
9         System.out.println("Enter the length of the array: ");
10        int n = scan.nextInt();
11        System.out.println("Enter the elements of the array: ");
12        int [] arr = new int[n];
13
14        for(int i=0; i<n; i++ ) {
15            arr[i] = scan.nextInt(); }
16
17        System.out.print("\n\nSum of odd indices :\t");
18        for (int i = 0; i < n; i = i + 2)
19            sumo= sumo + arr[i];
20        System.out.print(sumo + "\t");
21
22        System.out.print("\n\nSum of even indices :\t");
23        for (int i = 1; i < n; i = i + 2)
24            sume= sume + arr[i];
25        System.out.print(sume + "\t");
26    }
27 }
```

Enter the length of the array:

6

Enter the elements of the array:

4 6 10 5 7 9

Sum of odd indices : 21

Sum of even indices : 20

...Program finished with exit code 0

Press ENTER to exit console.



## EXTRA PROGRAMS → WEEK-3.

2. Number of +ve, -ve and zeroes in array.

```
⇒ import java.util.Arrays;
import java.util.Scanner;
```

```
public class Main {
    public static void main(String args[]) {
        int pn = 0, nn = 0, z = 0;
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter the length of the array: ");
        int n n = scan.nextInt();
        int [] arr = new int[n];
        System.out.println("Enter the elements of the array: ");

        for (int i = 0; i < n; i++) {
            arr[i] = scan.nextInt();
        }

        for (int i = 0; i < n; i++) {
            if (arr[i] > 0)
            { pn++; }

            else if (arr[i] == 0)
            { z++; }

            else
            { nn++; }
        }

        System.out.println("Number of zeros in array: " + z);
        System.out.println("Number of +ve no's: " + pn);
        System.out.println("Number of -ve no's: " + nn);
    }
}
```

```
1  import java.util.Arrays;
2  import java.util.Scanner;
3  public class Main {
4      public static void main(String args[]) {
5          int pn = 0, nn = 0, z=0;
6          Scanner scan = new Scanner(System.in);
7          System.out.println("Enter the length of the array: ");
8          int n = scan.nextInt();
9          int [] arr = new int[n];
10         System.out.println("Enter the elements of the array: ");
11
12         for(int i=0; i<n; i++ ) {
13             arr[i] = scan.nextInt(); }
14
15         for(int i = 0; i < n; i ++){
16             {
17                 if(arr[i] > 0)
18                 {
19                     pn++;
20                 }
21                 else if(arr[i] == 0)
22                 { z++; }
23                 else
24                 { nn++; }
25             }
26         System.out.println("Number of zeros in the array are: " + z);
27         System.out.println("Number of positive numbers in the array are: " + pn);
28         System.out.println("Number of negative numbers in the array are: " + nn);
29     }
30 }
```

Enter the length of the array:

9

Enter the elements of the array:

-7 -10 0 5 0 -18 90 0 -45

Number of zeros in the array are: 3

Number of positive numbers in the array are: 2

Number of negative numbers in the array are: 4

...Program finished with exit code 0

Press ENTER to exit console.



## 3. Super market Bill.

```
⇒ import java.util.Scanner;
```

```
public class Main{
```

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

```
        double rpi=0, totalb=0, dis=0, disa=0;
```

```
        System.out.println("Enter total items bought: ");
```

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

```
        int n = scan.nextInt();
```

```
        int quantity [] = new int[n];
```

```
        double rate [] = new double[n];
```

```
        for (int i=0; i<n; i++)
        {
```

```
            System.out.println("Enter the rate of " + (i+1) + " item: ");
```

```
            rate[i] = scan.nextDouble();
```

```
            System.out.println("Enter the quantity of " + (i+1) + " item: ");
```

```
            quantity[i] = scan.nextInt();
```

```
            rpi = (double) rate[i] * quantity[i];
```

```
            totalb = totalb + rpi;
```

```
        }
```

```
        System.out.println("Total bill = " + totalb);
```

```
        if (totalb > 10000) {
```

```
            dis = (totalb) * (5.0)/100;
```

```
            disa = (totalb) - dis;
```

```
        }
```

```
if (totalb >= 7500) {  
    dis = (totalb) * (3.0) / 100;  
    disa = (totalb) - dis;  
}
```

```
if (totalb >= 5000) {  
    dis = totalb * (2.0) / 100;  
    disa = totalb - dis;  
}
```

```
System.out.println("Discounted Bill = " + disa);
```

```
}
```



```
1 import java.util.Scanner;
2 public class Main{
3     public static void main(String [] args)
4     {
5         double rpi=0, totalb =0, dis=0, disa=0;
6         System.out.println("Enter the total items bought: ");
7         Scanner scan = new Scanner(System.in);
8         int n = scan.nextInt();
9         int quantity[]= new int[n];
10        double rate[]= new double[n];
11
12        for(int i = 0; i<n; i++)
13        {
14            System.out.println("Enter the rate of " + (i+1) + " item: ");
15            rate[i] =scan.nextDouble();
16            System.out.println("Enter the quantity of " + (i+1) + " item: ");
17            quantity[i]= scan.nextInt();
18            rpi= (double) rate[i] * quantity[i];
19            totalb = totalb + rpi;
20        }
21        System.out.println("Total Bill= "+totalb);
22        if (totalb>= 10000){
23            dis= (totalb)*(5.0)/100;
24            disa=(totalb)-dis;
25        }
26        if (totalb>= 7500){
27            dis = (totalb)*(3.0)/100;
28            disa =(totalb)-dis;
29        }
30        if (totalb>= 5000){
31            dis= (totalb)*(2.0)/100;
32            disa =(totalb)-dis;
```

```
28         disa = (totalb) - dis;  
29     }  
30     if (totalb >= 5000){  
31         dis = (totalb) * (2.0) / 100;  
32         disa = (totalb) - dis;  
33     }  
34     System.out.println("Discounted Bill= "+disa);  
35 }  
36 }
```

input

Enter the total items bought:

3

Enter the rate of 1 item:

2500

Enter the quantity of 1 item:

4

Enter the rate of 2 item:

900

Enter the quantity of 2 item:

2

Enter the rate of 3 item:

500

Enter the quantity of 3 item:

3

Total Bill= 13300.0

Discounted Bill= 13034.0

...Program finished with exit code 0

Press ENTER to exit console.

### EXTRA WEEK-3.

4. Import java.util.Scanner;

Import java.util.Arrays;

public class Main {

public static void main(String[] args)  
{

int n, j=0, k=0, sum=0, num=0, max=0, min=0;

System.out.println("Enter no. of elements: ");

Scanner scan = new Scanner(System.in);

n = scan.nextInt();

int A[] = new int[n];

int B[] = new int[n];

int C[] = new int[n];

System.out.println("Enter all elements: ");

for (int i=0; i<n; i++)

{ A[i] = scan.nextInt(); }

for (int i=0; i<n; i++)

{

if (A[i] % 2 != 0)

{ B[j] = A[i];

j++;

}

else {

C[k] = A[i];

k++;

}

}

System.out.println("Odd array: " + Arrays.toString(B));

System.out.println("Even array: " + Arrays.toString(C));



```
for(int i=0; i<K; i++) {
```

```
    sum = sum + C[i];
```

```
    if (C[i] > max)
```

```
        max = C[i];
```

```
    if (C[i] < min)
```

```
        min = C[i];
```

```
}
```

```
System.out.println("Sum of array C is" + sum);
```

```
System.out.println("Average of array C is" + ((sum)/K));
```

```
System.out.println("Maximum element of array C is" + max);
```

```
System.out.println("Minimum element of array C is" + min);
```

```
}
```

```
}
```



```
1  import java.util.Scanner;
2  import java.util.Arrays;
3  public class Main{
4      public static void main(String[] args)
5      {
6          int n, j=0, k=0, sum=0, num=0, max=0, min=1000;
7          System.out.println("Enter no of elements: ");
8          Scanner scan = new Scanner(System.in);
9          n = scan.nextInt();
10         int A[] = new int[n];
11         int B[] = new int[n];
12         int C[] = new int[n];
13         System.out.println("Enter all elements: ");
14
15         for (int i = 0; i < n; i++)
16         {
17             A[i] = scan.nextInt();
18         }
19         for (int i = 0; i < n; i++)
20         {
21             if (A[i] %2 != 0)
22             {
23                 B[j] = A[i];
24                 j++;
25             }
26             else
27             {
28                 C[k] = A[i];
29                 k++;
30             }
31         }
```

```

24         j++;
25     }
26     else
27     {
28         C[k] = A[i];
29         k++;
30     }
31 }
32 System.out.println("Odd array: " + Arrays.toString(B));
33 System.out.println("Even array: " + Arrays.toString(C));
34
35 for(int i=0; i<k; i++){
36     sum = sum + C[i];
37
38     if (C[i] > max)
39         max = C[i];
40
41     if(C[i] < min)
42         min = C[i];
43 }
44 System.out.println("Sum of array C is " + sum);
45 System.out.println("Average of array C is " + (sum/k));
46 System.out.println("Maximum element of array C is " + max);
47 System.out.println("Minimum element of array C is " + min);
48 }
49 }
50

```

input

Enter no of elements:

7

Enter all elements:

2 4 3 9 8 10 19

Odd array: [3, 9, 19, 0, 0, 0, 0]

Even array: [2, 4, 8, 10, 0, 0, 0]

Sum of array C is 24

Average of array C is 6

Maximum element of array C is 10

Minimum element of array C is 2

...Program finished with exit code 0

Press ENTER to exit console.