

## EXTRA PROBLEMS

①. sum of odd & even numbers in an array.

```
import java.util.Scanner;
```

```
public class SumOddEven
```

```
{
```

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

```
{
```

```
    int n, sumE=0, sumO=0;
```

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

```
    System.out.print("Enter the number of  
elements in array:");
```

```
    n = s.nextInt();
```

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

```
    System.out.println("Enter the elements of  
array");
```

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

```
{
```

```
    a[i] = s.nextInt();
```

```
}
```

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

```
{
```

```
    if (a[i] % 2 == 0)
```

```
    {
```

```
        sumE = sumE + a[i];
```

```
    }
```

```
    if (a[i] % 2 != 0) else
```

```
    {
```

```
        sumO = sumO + a[i];
```

```
    }
```

```
}
```

```
System.out.println("Sum of Even Numbers: " + sumE);
```

```
System.out.println("Sum of Odd Numbers: " + sumO);
```

```
}
```

```
}
```

⑤ counting positives, negatives and zero's

```
import java.util.Scanner;
```

```
public class CalNumberType
```

```
{
```

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

```
    {
```

```
        int n, positive=0, negative=0, zero=0, i;
```

```
        int arr[] = new int[50];
```

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

```
System.out.print("How many Number you  
want to Enter");
```

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

```
System.out.println("Enter " + n + " Number:");
```

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

```
{
```

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

```
}
```

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

```
{
```

```
if (arr[i] < 0)
```

```
{
```

```
negative++;
```

```
}
```

```
else if (arr[i] == 0)
```

```
{
```

```
zero++;
```

```
}
```

```
else
```

```
{
```

```
positive++;
```

```
}
```

```
}
```

```
System.out.print("positive numbers .
```

```
are : " + positive);
```

```
System.out.print("Negative number
```

```
are : " + negative);
```

```
System.out.print("zeros are : " + zero);
```

```
{ }
```

④ accept array of n elements  
↓

create two new arrays  
↓

B: odd no's      C: even numbers  
↓

Display (c) → sum

→ avg

→ max & min

```

import java.util.Scanner;

public class Odd_even_array {
    public static void main (String[] args) {
        int n, j=0, k=0, sum=0, avg, max, min;
        Scanner s = new Scanner (System.in);
        System.out.print ("Enter the numbers of
                           elements in the array:");
        n = s.nextInt();
        int[] a = new int[n];
        int[] b = new int[n];
        int[] c = new int[n];
        System.out.println ("Enter the elements
                             of the array:");
        for (int i=0; i<n; i++) {
            a[i] = s.nextInt();
        }
        for (int i=0; i<n; i++) {
            if (a[i] % 2 == 0) {
                c[j] = a[i];
                sum += a[i];
                j++;
            }
        }
    }
}

```



```

else {
    b[k] = a[i];
    k++;
}
}
avg = sum / j;
max = c[0];
min = c[0];
for (int i = 0; i < j; i++) {
    if (c[i] > max) {
        max = c[i];
    }
    if (c[i] < min) {
        min = c[i];
    }
}
}
System.out.print("In Array c - collection");
System.out.print("\n SUM : " + sum);
System.out.print("\n Average : " + avg);
System.out.print("\n MAX : " + max);
System.out.print("\n MIN : " + min);
}
}

```

③. \* double array rate per item say x  
 int array quantity purchased by customer  
 ↓  
 calculate total bill  
 ↓  
 final bill condition

{	≥ 10000 , dis 5%	}
	> 7500 & < 10,000 , dis 3%	
	> 5000 & dis 2%	

```

import java.util.Scanner;

public class Bill {

    public static void main (String[] args) {
        Scanner sc = new Scanner(System.in);

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

        int n = sc.nextInt();
        double indTot, tot=0;
        double[] rpi = new double[n];
        int[] quant = new int[n];
        for (int i=0; i<n; i++) {
            System.out.println ("enter quantity of
                               purchase and rate per
                               item" + (i+1));

            int q = sc.nextInt();
            double r = sc.nextDouble ();
            quant[i] = q;
            rpi[i] = r;
        }
        for (int i=0; i<n; i++) {
            indTot = quant[i] * rpi[i];
            tot += indTot;
        }
        if (tot >= 10000) {
            System.out.println (" Discount = 5%, Total bill
                               = "+ tot + " Discounted bill
                               = "+ (tot - tot * 0.05));
        }
    }
}

```

```
else if (tot >= 7500) {  
    System.out.println("Discount = 3% . Total bill ="  
        + tot + " Discounted Bill = " +  
        (tot - tot * 0.03));  
}
```

```
else if (tot >= 5000) {  
    System.out.println("Discount = 2% . Total Bill"  
        + tot + " Discounted Bill = " +  
        (tot - tot * 0.02));  
}
```

```
else {  
    System.out.println("NO DISCOUNT , Total bill"  
        + tot);  
}  
}  
}
```