PRACTICE-3

**1-Accept an array of size n from the user.Find the sum of even indices (i.e., 0,2,4....)
and sum of odd indices (1,3,5....) and print the same**

```
import java.util.Scanner;
class Sum
{
   public static void main(String args[])
   {
      int n;
      Scanner sc = new Scanner(System.in);
      System.out.print("Enter number of elements: ");
      n = sc.nextInt();
      int[] arr = new int[n];
      System.out.println("Enter the elements of array: ");
      for(int i=0;i<n;i++)
      {
         arr[i] = sc.nextInt();
      }
      int Se = 0, So = 0;
      for(int i = 0;i < arr.length;i++)
      {
         if (i%2 == 0)
            Se += arr[i];
         else
            So += arr[i];
      }
      System.out.println("Sum of even positions: " + Se);
      System.out.println("Sum of odd positions: " + So);
   }
}
```

Practice - 3

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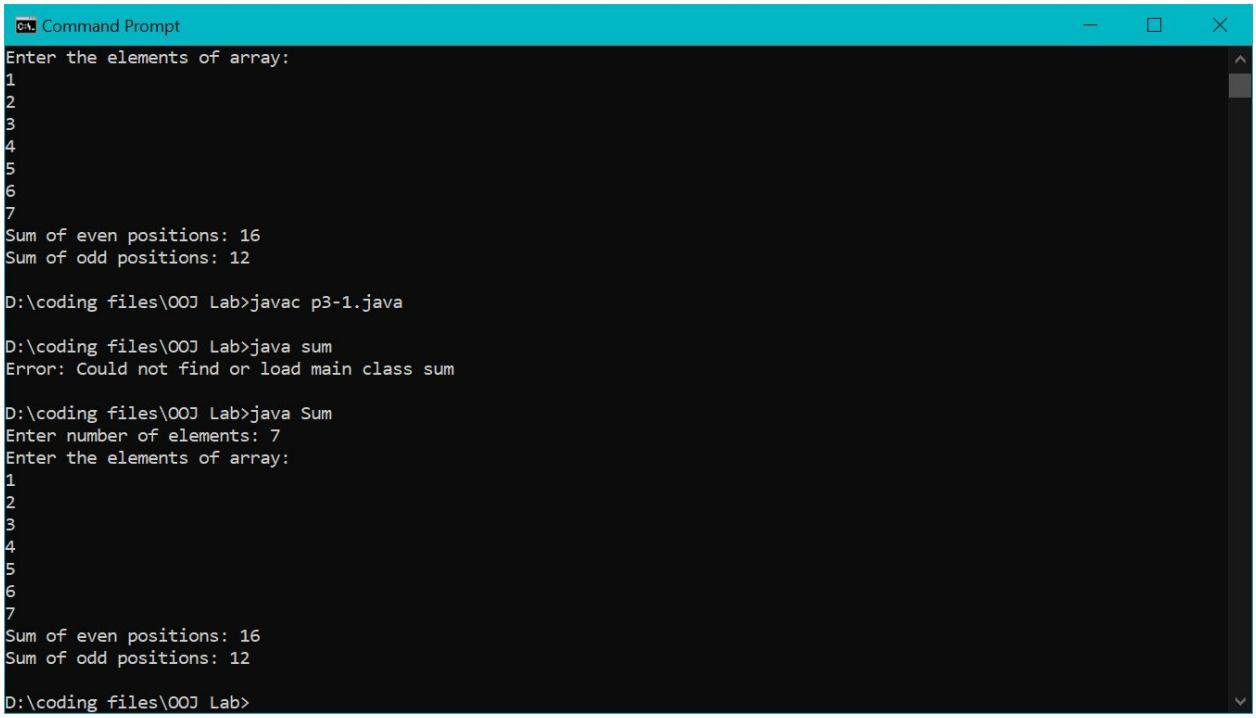
1) Accept an array of size n from user. find the sum of even & odd indices.

```
import java.util.Scanner;
class Sum
{
   public static void main(String args[])
   {
    int n;
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter no. of element:");
    n = sc.nextInt();
    int[] arr = new int[n];
    System.out.println("Enter the element of array:");
    for(int i=0; i<n; i++);
     {
       arr[i] = sc.nextInt();
     }
    int Se = 0, So = 0;
    for(int i = 0; i< arr.length; i++);
    {
       if(i%2 == 0)
            Se += arr[i];
       else
            So += arr[i];
     }
     System.out.println("Sum of even positions
                                    :" +Se);
     System.out.println("Sum of odd positions:"
                                    +So);
   }
}
```



2-Accept an array of n integers. Find the number of positive numbers, negative numbers
and zeros.

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

```
        int n,i,pos=0,neg=0,zero=0;
        int arr[] = new int[20];
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the length of Array :");
        n = sc.nextInt();
        System.out.println("Enter Numbers :");
        for(i=0;i<n;i++)
        {
           arr[i] = sc.nextInt();
        }
        for(i=0;i<n;i++)
        {
           if(arr[i] > 0)
           {
              pos++;
           }
           else if(arr[i] == 0)
           {
              zero++;
           }
           else if(arr[i] < 0)
           {
              neg++;
           }
        }
        System.out.println("Positive Numbers are: " +pos);
        System.out.println("Negative Numbers are: " +neg);
        System.out.println("Zeros are: " +zero);
    }
}
```

Practice - 8

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2) Accept an array of n integers. find the number of positive integer number & negative number.

```
import java.util.Scanner;
class type
 {
    public static void main(String args[])
    {
    int n, i, pos = 0, neg = 0, zero = 0;
    int arr[] = new int [20];
    Scanner sc = new Scanner (System.in);
    System.out.println(" Enter the length of Array:");
    n = sc.nextInt();
    System.out.println(" Enter Numbers :");
    for (i = 0; i < n; i++)
    {
       arr[i] = sc.nextInt();
    }
    for(i = 0; i < n; i++)
    {
       if (arr[i] > 0)
       {
          pos++;
       }
       else if (arr[i] == 0)
       {
          zero++;
       }
```

```
        else if (arr[i] < 0)
        {
            neg ++;
        }
    }
    System.out.println("Positive Numbers are:"
                                    + pos);
    System.out.println("Negative Numbers are:"
                                    +neg);
    System.out.println("Zero are:" +zero);
  }
}
```

```
D:\coding files\OOJ Lab>javac p3-2.java

D:\coding files\OOJ Lab>java Type
Enter the length of Array :
7
Enter Numbers :
1
2
3
4
5
6
7
Positive Numbers are: 7
Negative Numbers are: 0
Zeros are: 0

D:\coding files\OOJ Lab>
```

3- Consider a super market bill. Accept a double array holding rate per item of say x
items and an int array showing the quantity purchased by a customer. Calculate the
total bill amount and the final bill amount after giving discounts as per the following
slabs.
If the total bill amount >=10000, discount=5%
If the total bill amount >=7500 and <10000, discount=3%
If the total bill amount >=5000, discount=2%

```
import java.util.Scanner;
class bill {
   public static void main(String[] args){
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter number of items:");
      int n = sc.nextInt();
      double itotal, total = 0;
      double[] rate = new double[n];
      int[] qu = new int[n];
      for(int i = 0; i<n; i++){
         System.out.println("enter quantity of purchase and rate per item for
item"+(i+1));
         int q = sc.nextInt();
         double r = sc.nextDouble();
         qu[i] = q;
         rate[i] = r;
      }
      for(int i = 0; i<n; i++){
         itotal = qu[i] * rate[i] ;
         total += itotal;
      }
      if (total >= 10000) {
         System.out.println("\nDiscount = 5%. \nTotal bill = " + total + "
\nDiscounted bill = " + (total - total * 0.05));
      }

      else if (total >= 7500) {
         System.out.println("\nDiscount = 3%. \nTotal bill = " + total + "
\nDiscounted bill = " + (total - total * 0.03));
      }
       else if (total >= 5000) {
         System.out.println("\nDiscount = 2%. \nTotal bill = " + total + "
\nDiscounted bill = " + (total - total * 0.02));
      }
      else{
         System.out.println(" \nNo discount \nTotal bill = " + total );
      }
```

```
    }
}
```

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3) Consider Super Market Bill. Accept a double array holding rate per item of say x items and an int array showing the quantity purchased by a customer. Calculate the total bill amount and the final bill amount after giving discounts as per the following slabs.

If amt >= 10000, discount 5%.
" " >= 7500, discount 3%.
If amt >= 5000, discount 2%.

```
import java.util.scanner;
class bill {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the no. of items");
        int n = sc.nextInt();
        double itotal, total = 0;
        double [] rate = new double [n];
        int [] qn = new int [n];
        for(int i = 0; i<n ; i++){
            System.out.println("Enter quantity
                of purchase & rate per item
                for each item " +(i+1));
```

```
        int q = sc.nextInt();
        double r = sc.nextDouble();
        qu[i] = q;
        rate[i] = r;
    }
for(int i=0; i<n; i++){
    itotal = qu[i] * rate[i];
    total += itotal;
}
if(total >= 10000) {
        System.out.println("\n Discount = 5%
                \n Total bill = " + total
                + "\n Discounted bill ="
                + (total - total * 0.05));
}
else if(total >= 7500){
    System.out.println("\n Discount = 3% \n Total
                bill = " + total + "\n Discounted
                bill = " + (total - total * 0.03));
}
else {
    System.out.println("\n No discount .\n
                Total bill = " + total);
    }
}
}
```

```
D:\coding files\OOJ Lab>javac p3-3.java

D:\coding files\OOJ Lab>java bill
Enter number of items:
4
enter quantity of purchase and rate per item for item1
2
100
enter quantity of purchase and rate per item for item2
3
500
enter quantity of purchase and rate per item for item3
11
190
enter quantity of purchase and rate per item for item4
8
200

Discount = 2%.
Total bill = 5390.0
Discounted bill = 5282.2

D:\coding files\OOJ Lab>
```

4- Accept an array A of n elements. Create two new arrays where the first one say B that
holds all the odd numbers from array A and the second say C holds the even numbers
from array A. Display the sum, average, max and min of array C.

```
import java.util.Scanner;
class Practice
{
public static void main(String ss[])
{
Scanner sc= new Scanner(System.in);
int i,n,j = 0,k = 0,sum=0,avg=0,max=0,min=0;
System.out.println("Enter number of elements: ");
n = sc.nextInt();
int A[] = new int[n];
int B[] = new int[n];
int C[] = new int[n];
max=C[0];
System.out.println("Enter all the elements:");
for(i=0;i<n;i++)
 {
    A[i] = sc.nextInt();
 }
 for(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:");
  if(j > 1)
  {
    for(i=0;i<(j-1);i++)
    {
        System.out.println(B[i]);
```

```
    }
        System.out.println(B[j-1]);
  }
else
  {
    System.out.println("No number");
  }
  System.out.println("Even:");
  if(k>1)
       {
          for(i=0;i<(k-1);i++)
          {
             System.out.println(C[i]);
          }
        }
       System.out.println(C[k-1]);
       for(i=0;i<C.length;i++)
       {
       sum+=C[i];
       avg = sum/k;
       }
       for(i=0;i<k;i++){
         min=C[0];
       if (C[i]>max){
         max=C[i];
         }
          if(C[i]<min){
         min = C[i];
         }
         }
  System.out.println("SUM = "+sum);
  System.out.println("AVERAGE = "+avg);
        System.out.println("MAXIMUM is = "+max);
        System.out.println("MINIMUM is = "+min);
}
}
```

Practice - 3

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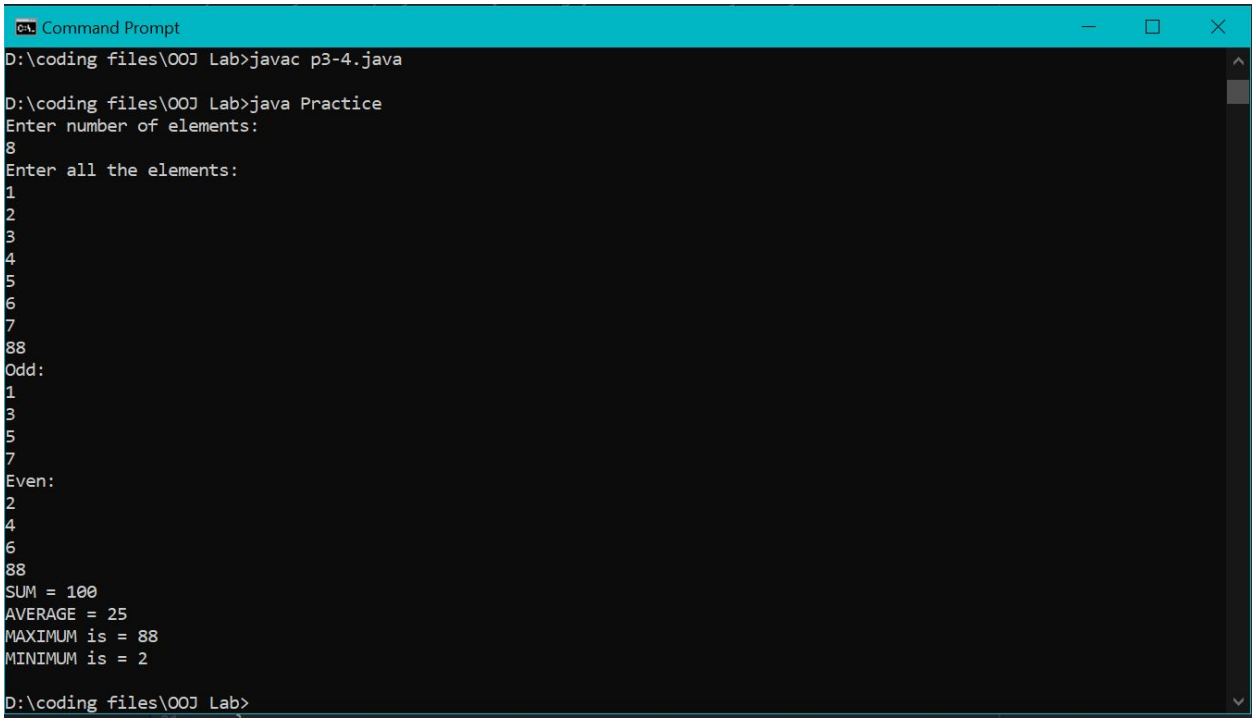
4) Accept an array of n elements. Create two new arrays and save all odd numbers in first & all even in second. & display Sum, avg, min of array.

```
import java.util.Scanner;
Class Practice
{
 Scanner sc = new Scanner(System.in);
 int i, n, j = 0, k = 0, sum = 0, avg = 0, max = 0, min = 0;
 System.out.println("Enter number of elements:");
 n = sc.nextInt();
 int A[] = new int[n];
 int B[] = new int[n];
 int C[] = new int[n];
 max = c[0];
 System.out.println("Enter all the elements:");
 for(i=0; i<n; i++)
  {
    A[i] = sc.nextInt();
  }
  for(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 :");
if (j>1)
{
    for(i=0; i<(j-1); i++)
    {
        System.out.println(B[i]);
    }
    System.out.print(B[j-1]);
}
else
{
    System.out.println("No number");
}
System.out.println("Even");
if (k>1)
    {
        for(i=0; i<(k-1); i++)
        {
            System.out.println(c[i]);
        }
    System.out.println(c[k-1]);
    for(i=0; i<c.length; i++)
    {
```

```
        sum += c[i];
        avg = sum/k;
    }
    for(i=0; i<k; i++){
    min = c[0];
    if(c[i]>max){
    max = c[i];
    }
    if(c[i]<min){
    min = c[i];
    }
    }
    System.out.println("SUM = "+sum);
    System.out.println("AVERAGE ="+avg);
    System.out.println("MAXIMUM IS = "+max);
    System.out.println("MINIMUM IS = "+min);
}
}
```


Command Prompt
D:\coding files\OOJ Lab>javac p3-4.java
D:\coding files\OOJ Lab>java Practice
Enter number of elements:
8
Enter all the elements:
1
2
3
4
5
6
7
88
Odd:
1
3
5
7
Even:
2
4
6
88
SUM = 100
AVERAGE = 25
MAXIMUM is = 88
MINIMUM is = 2
D:\coding files\OOJ Lab>

END