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++)</pre>
     {
       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);
  }
}
```

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HEMANG SINGH
                     Tractice - 3
                                                1BM19CSOGI
1) Accept an array of Size or from user. find the
```

```
Sum of even & odd indices.
to impart java util. Beauver;
```

public static void main(string args[]) int n Scanner 3c = new Scanner (System.in); System.out. printen("Enta no. of element: "); N = 3c. next Int(); int [] am = new int [m]; System. out. printly "Enter the element of orray." foul int i=0; i<u; i++)} an[i] = sc. next Int(); int Se = 0, So = 0; for (ind i = 0; i < arm. length; i++)} if (i y. 2 = = 0) Se + = our [;]; else

So += over [i]:

System. out. printlu ("Sum of even positions System. out. print du ("Sum of odd positions:"

```
Enter the elements of array:

2
3
4
5
6
7
Sum of even positions: 16
Sum of odd positions: 12
D:\coding files\00J Lab>javac p3-1.java
D:\coding files\00J Lab>java sum
Error: Could not find or load main class sum
D:\coding files\00J Lab>java Sum
Enter number of elements: 7
Enter the elements of array:
1
2
3
4
5
6
7
Sum of even positions: 16
Sum of odd positions: 12
D:\coding files\00J Lab>java Sum
Enter the elements of array:
```

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);
 }
}
```

It Accept an array of a integers. find the number of positive integer number & negative number.

import java. Util. Scanner; class type

public static void main (string engs[7])

{
int n, i, pos = 0, neg = 0, zero = 0;
int am [] = new int [20];

3 conner 30 = new 8 conner (Systemin);

Eysten. out. print lu!" Enter the length ef Array:

n = sc. next Int();

System. out. paintle (" Enter Numbers: ");

for (i=0; i< w; i++)

om [i] = 8c. next Int(1;

for (i = 0; i < u; i++)

b os ++;

else if (au [i] ==0)

& zero++;

3

else if (our [i] <0)

h

neg ++;

3

System. out. printly "Positive Numbers are: "
+ pos!;

System. out. printly "Negative Humbers are: "
+ tweg!;

System. out. printly ("Zero ere: "+zero!;

3

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```
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 );
     }
```

Consider Super Market Bill. Accept a double array brolding rate per item of say x items and on int array showing the quantity purchased by a customer. Calculate the total bill amount and the final bill amount often giving discounts as par the following slabs.

If and > = 10000, discount 5%.

" = FEOO, discount 3%.

If ant > = 5000, discount 2%.

import java. Util. scanner; class bill ?

}

public static void main! straing [] orgs) {

3 cannot se = new 3 cannot (systemia);

System. out. print lu ("Ent a the no. of items');

int u = se. next Int();

double itetal, total = 0;

double [] state = new double [n];

int [] qu = new int [n];

foul lut i = 0; i < u; toit +) {

System. out. print lu ("Ent a quantity

of punchase & note per item

for each item " + (i+1));

```
lut q = sc. next Iul();
       double on = sc. next souble ();
         qu [i] = q;
         rate [i] = n;
for ( int i = 0; icn; i++) {
    itotal = queij * rate [i];
     total + + itatal;
if ( total >= 10000) &
        System. out. print In (" In Discount = 5"1.
                      In Total bill = " + total bit
                       + " In Discounted Will ="
                       + (total-total * 0.05));
else if ( total > = 7500) {
   System. out. println (" In Discount = 3 4. In Jotal
                        bill = " + total + " In Discounted
                          bill = " + ( total - total x 0.031);
  4
  else E
     System. out. printly " In No discount In
                         Total bill = " + total);
```

```
D:\coding files\OOJ Lab>javac p3-3.java
D:\coding files\OOJ Lab>java bill
Enter number of items:
enter quantity of purchase and rate per item for item1
100
enter quantity of purchase and rate per item for item2
500
enter quantity of purchase and rate per item for item3
11
190
enter quantity of purchase and rate per item for item4
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++)</pre>
    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);
}
}
```

```
4) Accept on array of n element. Create two
   new arrays and some all odd number in first & all ever in second. I display
   Sum, ang, win of array (.
  import j'ava. util. scanner;
   Class Bractice:
    Scanner SC = New Scanner ( 3ystem in);
int i, n, j = 0, K = 0, Sum = 0, ang = 0, max = 0, min = 0;
     System. out. print lu (" Enter number of elements)
     n = Sc. next Int();
      int A CJ = New int [u];
      int B[] = new int[n];
      int C[] = new int[n];
       max = c [0];
       System. out. printlu ("Enter all the element:");
       foulizo; ich; ittl
           A[i] = sc. next Int();
          for(1=0; i < n; i+1)
            if (A[i] 1.2 !=0)
```

BCiJ = ACiJ:

```
j++;
   else
      ([x] = A[i];
System. oud. printly (" odd:");
 if (1>1)
     foul i = 0; i < (j-1); i++)
      System. out. print lu (B [-]);
     Eysten. out . print (Bli-13);
 else
       System. out print lu ("No number");
     System. out. printle " Even");
     if (x >1)
            for(i=0; i<(k-1); i+1)

2 system.out. println(( egeis);
         : ([[-1]s / whire q. buo. motog &
         for( := 0; i < c. length ; i++)
```

```
Sum + = c[i];
 org = sum K;
for (i = 0; i < k; i++18
min = c Co];
if (c [i] > wax) &
 max = c[i];
 if (cli) cmin 12
 min = c [i];
  System. out. printly (" sun = " + sum);
  Eysten. out. printly "AVERAGE =" + aug);
  System. out. printly (" MAXIMUM ZS = " + max);
  System. out. printly "MINIMUM IS = " +win);
```

```
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
6
7
88
Odd:
1
1
3
5
7
Even:
2
4
6
88
SUM = 100
AVERAGE = 25
MAXIMUM is = 88
MINIMUM is = 88
MINIMUM is = 2
D:\coding files\OOJ Lab>
```

END