Assignment-9

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Write a program add the two integer array of size 5 and store the result in the third array.

Ans:

```
package array;
import java.util.Scanner;
import java.util.Arrays;
public class AddTwoArray {
public static void main(String[] sandle)
{
Scanner scan=new Scanner(System.in);
int[] array1=new int[5];
int[] array2=new int[5];
for(int i=0;i<array1.length;i++)
{
System.out.println("Enter the number:");
array1[i]=scan.nextInt();
```

```
}
for(int i=0;i<array2.length;i++)
{
System.out.println("Enter the num:");
array2[i]=scan.nextInt();
}
int [] res=result(array1,array2);
System.out.println("Array 1:
"+Arrays.toString(array1));
System.out.println("Array 2:
"+Arrays.toString(array2));
System.out.println("Array res:
"+Arrays.toString(res));
}
private static int[] result(int[] array1, int[]
array2) {
int res[]=new int[array1.length];
for(int i=0;i<array1.length;i++)
{
res[i]=array1[i]+array2[i];
```

```
}
return res;
}
}
```

```
OUTPUT: Enter the number:
5
Enter the number:
6
Enter the number:
4
Enter the number:
8
Enter the number:
6
Enter the num:
5
```

```
Enter the num:
5
Enter the num:
5
Enter the num:
8
Enter the num:
4
Array 1: [5, 6, 4, 8, 6]
Array 2: [5, 5, 5, 8, 4]
Array res: [10, 11, 9, 16, 10]
```

write a program to find the sum of even number and odd number in the array of size 10.----❼

Ans:

```
package array;
import java.util.Scanner;
public class OddorEvenArray {
public static void main(String[] a)
{
Scanner scan=new Scanner(System.in);
System.out.println("Enter the Array length:");
int n=scan.nextInt();
int []array=new int[n];
for(int i=0;i<array.length;i++)
{
System.out.println("Enter value: ");
array[i]=scan.nextInt();
}
int evenNum=0,oddNum=0;
for(int i=0;i<array.length;i++)
{
```

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

{

evenNum+=array[i];

}

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

{

oddNum+=array[i];

}

}

System.out.println("EvenNumber total:
"+evenNum);

System.out.println("odd total: "+oddNum);

scan.close();

}

}
```

OUTPUT:

```
Enter the Array length:
```

```
8
Enter value:
5
Enter value:
6
Enter value:
4
Enter value:
9
Enter value:
7
Enter value:
3
Enter value:
5
Enter value:
9
EvenNumber total: 10
```

```
odd total: 38
```

Write a program to print lowercase letter from your name.

Ans:

```
package array;
import java.util.Scanner;
public class LowerCasePrint {
public static void main(String[] sandel)
{
Scanner scan=new Scanner(System.in);
System.out.println("Enter the word: ");
String word=scan.next();
StringBuilder sb=new StringBuilder();
for(int i=0;i<word.length();i++)
```

```
{
if(Character.isLowerCase(word.charAt(i)))
sb.append(word.charAt(i));
}
StringBuilder sb1=new StringBuilder();
for(int i=0;i<word.length();i++)
{
if(Character.isUpperCase(word.charAt(i)))
sb1.append(word.charAt(i));
}
System.out.println("Lowercase letter: "+sb);
System.out.println("Uppercase letter: "+sb1);
scan.close();
}
}
```

OUTPUT:

```
Enter the word:
```

```
SsAaNnTdHeANlAM

Lowercase letter: sandel

Uppercase letter: SANTHANAM
```

write a program to count the number of vowels and consonents in the given message.

Ans:
```
package array;

import java.util.Scanner;

public class ConsonantCount {

public static void main(String[] sandel)

{

Scanner scan=new Scanner(System.in);

System.out.println("Enter sentence: ");

String sentence=scan.nextLine();

int digit=0,con=0,vowel=0;

for(int i=0;i<sentence.length();i++)

{

char ch=sentence.charAt(i);
```

```
if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u')
{
vowel++;
}
else if (ch>'0' && ch<'9')
{
digit++;
}
else if(ch>'a'&& ch<'z')
{
con++;
}
}
System.out.println("vowel count "+ vowel);
System.out.println("digit count "+ digit);
System.out.println("consonant count "+ con);
}
}
```

OUTPUT:

```
Enter sentence:
santhanam 123 io
vowel count 5
digit count 3
consonant count 6
```

Repeated Salary Count

John is working as a clerk in an organization where N number of people are working. His boss has asked him to get the count of employees who get same salary. Help him to get the count of repeated salary.

Include a function named countRepeaters that accepts 2 arguments and returns an int. The first argument is the input array and the second argument is an int that corresponds to the size of the array. The function returns an int that corresponds to the number of repeaters.

If the size of the array is negative or if any of the array elements are negative, print "Invalid Input" and terminate the program. Input and Output Format:

Input consists of n+1 integers. The first integer corresponds to n, the number of elements in the array. The next 'n' integers correspond to the elements in the array.

Output consists of an integer that corresponds to the number of repeaters.

Assume that utmost one element in the array would repeat.

Assume that the maximum number of elements in the array is 20.

Sample Input 1:

5

1000

2000

3500

2000

5000

Sample Output 1:

2

Sample Input 2:

-5

Sample Output 2:

Invalid Input

Sample Input 3:

5

1000

-2000

Sample Output 3:

```
package array;

import java.util.Scanner;

public class Salary

{

static int count=1;

public static void arrayRep(int array[],int
size) {

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

{

for(int j=i+1;j<size;j++)

{

if(array[i]==array[j])

count++;

}

}System.out.println("salary count "+count);

}
```

```
public static void main(String[] s)
{
Scanner scan=new Scanner(System.in);
System.out.println("Enter the Number: ");
int size=scan.nextInt();
int array[]=new int[20];
if(size>0)
{
System.out.println("Enter the salary:");
for(int i=0;i<size;i++)
{
array[i]=scan.nextInt();
if(array[i]<0)
{
System.out.println("Invalid Intput");
System.exit(0);
}
}
```

```
Salary.arrayRep(array,size);
}
else
{
System.out.println("Invalid Input!!!");
}
}
```

Output:

```
Enter the Number:
5
Enter the salary:
6000
8000
6000
7000
9000
```

```
salary count 2
```

3.maximumSum

Read the question carefully and follow the input and output format.

Given an Integer array, find out sum of Even and odd Numbers individually and find the maximum.

Input and Output Format :

First line of input consists of n, the number of elements. Next n lines correspond to the array elements. Output consist of maximum of odd and even sum.

1) Print "Invalid array size" when size of the array is a negative number and terminate the program.

2) Print "Invalid input" when there is any negative numbers available in the input array and terminate the program.

Include a function named maximumSum(int numbers[], int size) whose return type is an integer,.

Sample Input 1:

5

12

13

14

15

16

Sample Output 1:

42

Sample Input 2:

-13

Sample Output 2:

```
package array;
import java.util.Scanner;
public class SumDigit {
public static void main(String[] args) {
Scanner scan=new Scanner(System.in);
int num;
```

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

num=scan.nextInt();

int []array=new int[num];

System.out.println("Enter the "+num +" numbers
:");

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

{

array[i]=scan.nextInt();

}

System.out.println("Big Number
"+bigNumber(array));

}

static int bigNumber(int []array){

int even=0;

int odd=0;

for(int i=0;i<array.length;i++)

{

if(array[i]%2==0)

{
```

```
even+=array[i];
}
if(array[i]%2!=0)
{
odd+=array[i];
}
}
return (even>odd)?even:odd;
}
}
```

OUTPUT:

```
Enter the Number:
5
Enter the 5 numbers :
12
13
14
15
```

```
16

Big Number 42
```