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

```
package Assignment9;
import java.util.Arrays;
public class Merge {
public static void main(String[] args) {
// TODO Auto-generated method stub
int[] firstArray = {1,2,3,4,5}; //source array
int[] secondArray = {4,5,6,7,8}; //destination array
int fal = firstArray.length; //determines length of firstArray
int sal = secondArray.length; //determines length of secondArray
int[] result = new int[fal + sal]; //resultant array of size first array
and second array
System.arraycopy(firstArray, 0, result, 0, fal);
System.arraycopy(secondArray, 0, result, fal, sal);
System.out.println(Arrays.toString(result)); //prints the resultant array
}
}
```

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

```
package Assignment9;
import java.util.Scanner;
public class SumArray {
private static Scanner sc;
public static void main(String[] args) {
// TODO Auto-generated method stub
int Size, i, EvenSum = 0, OddSum = 0;;
sc = new Scanner(System.in);
System.out.print(" Please Enter Number of elements in an array : ");
Size = sc.nextInt();
int [] a = new int[10];
System.out.print(" Please Enter " + 10 + " elements of an Array : ");
for (i = 0; i < 10; i++)
{
a[i] = sc.nextInt();
}
for(i = 0; i < 10; i++)
{
if(a[i] % 2 == 0)
{
EvenSum = EvenSum + a[i];
}
else
{
OddSum = OddSum + a[i];
}
}
System.out.println("\n The Sum of Even Numbers in this Array = " +
EvenSum);
System.out.println(" The Sum of Odd Numbers in this Array = " + OddSum);
}
}
```

3.Write a program to print lowercase letter from your name.
--->
```
package Assignment9;
import java.util.Scanner;
public class Lowercase {
public static void main(String[] args) {
// TODO Auto-generated method stub
Scanner in = new Scanner(System.in);
System.out.print("Input a String: ");
String line = in.nextLine();
line = line.toLowerCase();
System.out.println(line);
}
}
```

4.write a program to count the number of vowels and consonents in the given message.
--->
```
package Assignment9;
import java.util.Scanner;
public class Vowel {
public static void main(String[] args) {
// TODO Auto-generated method stub
int vowels_count, consonants_count;
String my_str;
vowels_count = 0;
consonants_count = 0;
Scanner scanner = new Scanner(System.in);
System.out.println("A scanner object has been defined ");
System.out.print("Enter a statement: ");
my_str = scanner.nextLine();
my_str = my_str.toLowerCase();
for (int i = 0; i < my_str.length(); ++i) {
char ch = my_str.charAt(i);
if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u') {
++vowels_count;
}
else
if ((ch >= 'a' && ch <= 'z')) {
++consonants_count;
}
}
System.out.println("The number of vowels in the statement is: " +
vowels_count);
System.out.println("The number of vowels in the Consonants is: " +
consonants_count);
}
}
```

5.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 ter minate 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. Th e 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:

Invalid Input

--->

```
package Assignment9;
import java.util.Scanner;
public class Repeat {
public static void main(String[] args) {
// TODO Auto-generated method stub
int n,i,j,k,count=1;
Scanner in=new Scanner(System.in);
n=in.nextInt();
if(n<0)
{
System.out.println("invalid array size");
System.exit(0);;
}
else
{
int a[]=new int[100];
for(i=0;i<n;i++)
{
a[i]=in.nextInt();
if(a[i]<0)
{
```

```
System.out.println("invalid input");
System.exit(0);
}
}
for(i=0;i<n;i++)
{
for(j=i+1;j<n;)
{
if(a[i]==a[j])
{
count++;
for(k=j;k<n;k++)
a[k]=a[k+1];
n--;
}
else
j++;
}
}
System.out.println(count);
}
}
}
```

6.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. O utput 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 p rogram.

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:
Invalid array size

--->

```
package Assignment9;
import java.util.Scanner;
public class Maxmin {
public static void main(String[] args) {
// TODO Auto-generated method stub
int Size, i;
int evenCount = 0, oddCount = 0;
Scanner sc = new Scanner(System.in);
System.out.print(" Please Enter Number of elements in an array : ");
Size = sc.nextInt();
int [] a = new int[Size];
System.out.print(" Please Enter " + Size + " elements of an Array : ");
for (i = 0; i < Size; i++)
{
a[i] = sc.nextInt();
}
for(i = 0; i < Size; i++)
{
if(a[i] % 2 == 0)
{
evenCount++;
}
else
{
oddCount++;
}
}
System.out.println("\n Total Number of Even Numbers in this Array = " +
evenCount);
System.out.println("\n Total Number of Odd Numbers in this Array = " +
oddCount);
}
}
```