Q1. Write a program to find the sum of even number and odd number in the array of size 10.

Code:

```
package Array;
 import java.util.Scanner;
public class sumOfEvenOdd {
 public static void main(String[] args) {
 int size, i, SumEven = 0, SumOdd = 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)
 {
 SumEven = SumEven + a[i];
}
 Else
 {
 SumOdd = SumOdd + a[i];
  }
}
 System.out.println(" Sum of even numbers in array = " + SumEven);
System.out.println(" Sum of Odd Numbers in array = " + SumOdd);
}
```

```
}
```

Q2. Write a program to print lowercase letter from your name.

Code:

```
package Array;
 import java.util.Scanner;
 public class lowerCaseOfName { public static void main(String[] args) {
 String str1;
 Scanner sc = new Scanner(System.in);
 System.out.println("Please enter your name here: ");
str1 = sc.nextLine();
StringBuffer newStr=new StringBuffer(str1);
 for(int i = 0; i < str1.length(); i++) {
 if(Character.isLowerCase(str1.charAt(i))) {
 newStr.setCharAt(i, Character.toUpperCase(str1.charAt(i)));
}
 else if(Character.isUpperCase(str1.charAt(i))) {
newStr.setCharAt(i, Character.toLowerCase(str1.charAt(i)));
}
}
 System.out.println("String after conversion : " + newStr);
 }
 }
```

Q3. Write a program to count the number of vowels and consonents in the given message.

Code:

```
package Array;
import java.util.Scanner;
public class CountVowelConsonant {
public static void main(String[] args) {
int vowelsCount = 0, consonentsCount = 0;
```

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

String str;

 System.out.println("please enter a message: ");

str = sc.nextLine();

str = str.toLowerCase();

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

 if(str.charAt(i) == 'a' || str.charAt(i) == 'e' || str.charAt(i) == 'i' || str.charAt(i) == 'o' || str.charAt(i) == 'u')

{

vowelsCount++;

}

else if(str.charAt(i) >= 'a' && str.charAt(i)<='z') { consonentsCount++;

}

}

 System.out.println("Number of vowels: " + vowelsCount);

System.out.println("Number of consonants: " + consonentsCount);

} }
```

Q4. 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 t he 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 argu ment 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 negativ e 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 i n the array.

The next 'n' integers correspond to the elements in the array.

Code:

```
package Array;

import java.util.Scanner;

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

```
 Scanner sc = new Scanner(System.in);
 int size;
System.out.println("Please Enter Number of Employee : ");
size = sc.nextInt();
int [] arr = new int[size];
if(size>0) {
 System.out.println(" Please enter " + size + " Employee Salary : ");
for (int i = 0; i < size; i++) {
 arr[i] = sc.nextInt();
}
 countRepeater(arr);
}
 else {
 System.out.println("Please input Valid Size of an Array : positive value only.");
}
 }
public static void countRepeater(int[] arr) {
int j,count=0;
for(int i = 0; i < arr.length; i++) {
for(j = i+1; j< arr.length; j++) {
 if(arr[i] == arr[j]) count++;
 }
 }
 System.out.println("The number of Employee Having Same Salary");
System.out.println(count);
}
 }
```