```java
import java.util.Arrays;
import java.util.Scanner;
class Main
{
  public static void sort(int[] arr)
  {
    int zeros = 0;
    for (int val : arr)
    {
      if (val == 0)
      {
        zeros++;
      }
    }
    int k = 0;
    while (zeros-- != 0)
    {
      arr[k++] = 0;
    }
    while (k < arr.length)
    {
      arr[k++] = 1;
    }
  }
  public static void main (String[] args)
  {
    System.out.println("Ch.Ramana Rohith");
    Scanner sc=new Scanner(System.in);
     System.out.print("Enter the size of array
     int length =sc.nextInt();
     int[] arr=new int[length];
    System.out.println("enter the binary ele
     for (int i = 0; i <length; i++)
     {
        arr[i]= sc.nextInt();
     }
     sort(arr);
    System.out.println(Arrays.toString(arr));
  }
}
```

```
Ch.Ramana Rohith
Enter the size of array :4
enter the binary elements :
1
0
0
1
[0, 0, 1, 1]

Process finished.
```

```java
import java.util.Scanner;
class BinarySearch
{

  static int binarySearch(String[] arr, String
  {
      int l = 0, r = arr.length - 1;
      while (l <= r)
      {
        int m = l + (r - l) / 2;
        int res = x.compareTo(arr[m]);
        if (res == 0)
        return m;
        if (res > 0)
        l = m + 1;
        else
        r = m - 1;
      }
      return -1;
    }
  public static void main(String []args)
  {
      System.out.println("Ch.Ramana Rohith");
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter Size :");
      int n = sc.nextInt();
      sc.nextLine();
      String[] arr = new String[n];
      System.out.println("enter "+n+" elements
      for (int i=0;i<n;i++)
      {
        arr[i]=sc.nextLine();
      }
      System.out.println("Enter String you want
      String x = sc.nextLine();
      int result = binarySearch(arr, x);
      if (result == -1)
      System.out.println("Element not present")
      else
      System.out.println("Element found at "+
  }
}
```

```
Ch.Ramana Rohith
Enter Size :
3
enter 3 elements :
raman
rohith
chadaram
Enter String you want to Search :
rohith
Element found at index 1

Process finished.
```

```java
import java.util.Scanner;
class Conversion
{
static int replaceDigit(int x, int a,int b)
{
    int result = 0, multiply = 1;
    while (x % 10 > 0)
    {
        int remainder = x % 10;
        if (remainder == a)
        result = result + b * multiply;
        else
        result = result + remainder * multiply;
        multiply *= 10;
        x = x / 10;
    }
    return result;
}
public static void main(String[] args)
{
    System.out.println("Ch.Ramana Rohith");
    Scanner sc=new Scanner(System.in);
    System.out.print("Enter your number : ");
    int x = sc.nextInt();
    System.out.print("Enter number to  convert
    int a = sc.nextInt();
    System.out.println("Enter number to convert
    int b = sc.nextInt();
    System.out.println(replaceDigit(x, a, b));
}
}
```

```
× Terminal                                    ⧉

Ch.Ramana Rohith
Enter your number : 23411
Enter number to  convert : 1
Enter number to convert into :
6
23466


Process finished.
```

```java
//4th question
//Ch.Ramana Rohith
class Pattern
{
  public static void main(String args[])
  {
    for(int i=1;i<=5;i++)
    {
      for(int j=1;j<=i;j++)
      {
        if(i==5 && j==3)
        {
          System.out.print("@");
        }
        else if(j==1 || j==i)
        {
          System.out.print("1");
        }
        else
        {
          System.out.print("0");
        }
      }
      System.out.println();
    }
  }
}
```

× Terminal

```
1
11
101
1001
10@01
```