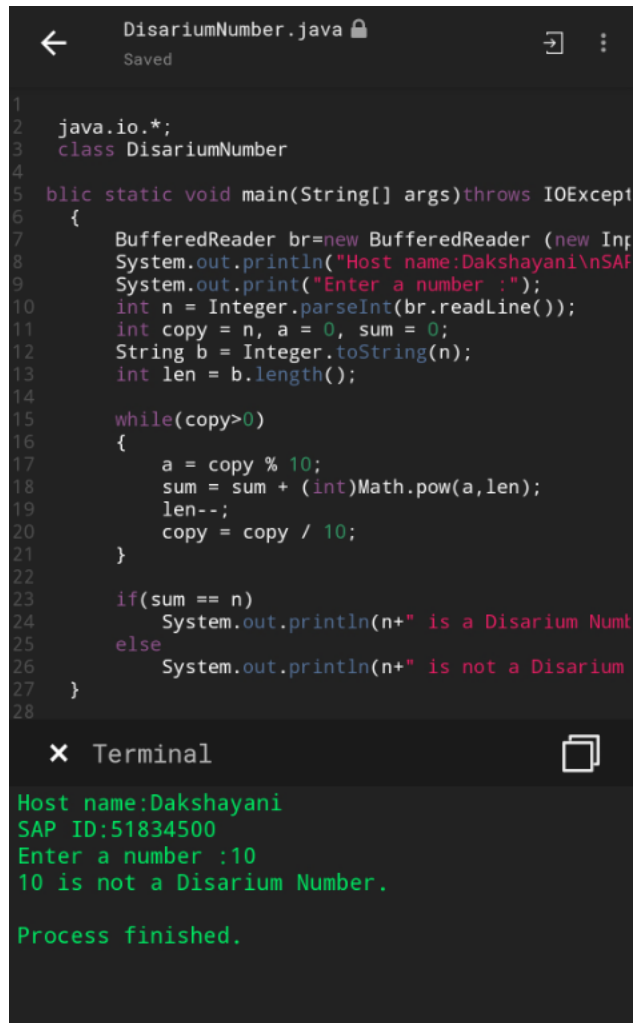1st question and answer

```
1
2   java.io.*;
3   class DisariumNumber
4
5   blic static void main(String[] args)throws IOExcept
6   {
7       BufferedReader br=new BufferedReader (new Inp
8       System.out.println("Host name:Dakshayani\nSAF
9       System.out.print("Enter a number :");
10      int n = Integer.parseInt(br.readLine());
11      int copy = n, a = 0, sum = 0;
12      String b = Integer.toString(n);
13      int len = b.length();
14
15      while(copy>0)
16      {
17          a = copy % 10;
18          sum = sum + (int)Math.pow(a,len);
19          len--;
20          copy = copy / 10;
21      }
22
23      if(sum == n)
24          System.out.println(n+" is a Disarium Numb
25      else
26          System.out.println(n+" is not a Disarium
27  }
28
```

✕ Terminal

```
Host name:Dakshayani
SAP ID:51834500
Enter a number :10
10 is not a Disarium Number.

Process finished.
```

2nd question and answer

```java
1
2  ort java.util.Arrays;
3
4  lic class SortingBinaryArray
5
6  private static void sortBinaryArray(int[] inputArra
7  {
8      int zeroCount = 0;
9
10     System.out.println("Host name:Dakshayani\nSAP I
11     System.out.println("Input Array Before Sorting
12
13
14     for (int n = 0; n < inputArray.length; n++)
15     {
16         if (inputArray[n] == 0)
17         {
18             zeroCount++;
19         }
20     }
21
22
23     for (int n = 0; n < zeroCount; n++)
24     {
25         inputArray[n] = 0;
26     }
27
28
29     for (int n = zeroCount; n < inputArray.length;
30     {
31         inputArray[n] = 1;
32     }
33
34     System.out.println("Input Array After Sorting :
35  }
36
37  public static void main(String[] args)
38  {
39      sortBinaryArray(new int[] {1, 0, 1, 1, 0, 1, 0,
40  }
```

✕ Terminal   ▢

```
st name:Dakshayani
P ID:51834500
put Array Before Sorting :[1, 0, 1, 1, 0, 1, 0,
put Array After Sorting :[0, 0, 0, 0, 1, 1, 1,

ocess finished.
```

3rd the question and answer

```java
class ReplacingNumber

.nt replaceDigit(int a, int numbertobereplaced,
                   int replacingnumber)

result = 0, multiply = 1;

e (a % 10 > 0)


int remainder = a % 10;

if (remainder == numbertobereplaced)
    result = result + replacingnumber * multiply;

else
    result = result + remainder * multiply;

multiply *= 10;
a = a / 10;

rn result;


static void main(String[] args)

a = 858, numbertobereplaced = 8,replacingnumber=5;
em.out.println("Host name:Dakshayani\nSAP ID:51834!
em.out.println(replaceDigit(a, numbertobereplaced,
```

✕ Terminal

```
Host name:Dakshayani
SAP ID:51834500
555

Process finished.
```

5th question and answer

```java
lic class BinarySearch

  public static int binarySearch(int[] M, int left,
  {
      if (left > right) {
          return -1;
      }

      int mid = (left + right) / 2;

      if (n == M[mid]) {
          return mid;
      }

      else if (n < M[mid]) {
          return binarySearch(M, left, mid - 1, n);
      }

      else {
          return binarySearch(M, mid + 1, right, n);
      }
  }

  public static void main(String[] args)
  {
      int[] M = { 47,37,12,98,36,04,};
      int key = 36;

      int left = 0;
      int right = M.length - 1;

      int index = binarySearch(M, left, right, key);

      System.out.println("Host name:Dakshayani\nSAP
      if (index != -1) {
          System.out.println("Element found at index
      } else {
          System.out.println("Element not found in th
      }
```

✕ Terminal

```
Host name:Dakshayani
SAP ID: 51834500
Element found at index 4

Process finished.
```

Quiz marks:-7