M.Likhitha

SAP I'd : 51834624.

2nd Question :

```java
abstract class Furniture {

   protected String color;
   protected int width;
   protected int height;
   public abstract void accept();
   public abstract void display();
 }
     class chair extends Furniture {
   private int numOf_legs;

   public void accept() {

   color = "Brown";
   width = 36;
   height = 48;
   numOf_legs = 4;
 }
    public void display()      {
   System.out.println("DISPLAYING VALUE FOR CHA
   System.out.println("=========================
   System.out.println("Color is" + color);
   System.out.println("Width is" + width);
   System.out.println("Height is" + height);
   System.out.println("Number of legs is" + num
   System.out.println(" ");
   }
 }

 class Bookshelf extends Furniture {

   private int numOf_shelves;

   public void accept()   {

    color ="Black";
    width = 72;
    height = 84;
    numOf_shelves = 4;
   }
   public void display ()   {
    System.out.println("DISPLAYING VALUES FOR E
    System.out.println
                        ===============
```

⋮ Try Dcoder's keyboard ⌨ ▶

```java
32    private int numOf_shelves;
33
34    public void accept()  {
35
36     color ="Black";
37     width = 72;
38     height = 84;
39     numOf_shelves = 4;
40     }
41    public void display ()  {
42     System.out.println("DISPLAYING VALUES FOR E
43     System.out.println
44    ("=====================================");
45
46    System.out.println("Color is" + color);
47    System.out.println("Width is" + width);
48    System.out.println("Height is" + height);
49    System.out.println("Number of shelves is" +
50    System.out.println(" ");
51     }
52   }
53
54   class FurnitureDemo  {
55    public static void main(String[] args)    {
56      System.out.println("Host name : M.Likhitha
57      System.out.println("Sap id : 51834624");
58    Bookshelf b1 = new Bookshelf();
59    b1.accept();
60    b1.display();
61
62
63    chair c1 = new chair ();
64    c1.accept();
65    c1.display();
66
67    }
68    }
```

Edit with WPS Office

Output Screen :

```
    ×        Terminal                              ⬚

Host name : M.Likhitha
Sap id : 51834624
DISPLAYING VALUES FOR BOOKSHELF
====================================
Color isBlack
Width is72
Height is84
Number of shelves is4

DISPLAYING VALUE FOR CHAIR
====================================
Color isBrown
Width is36
Height is48
Number of legs is4


Process finished.
```
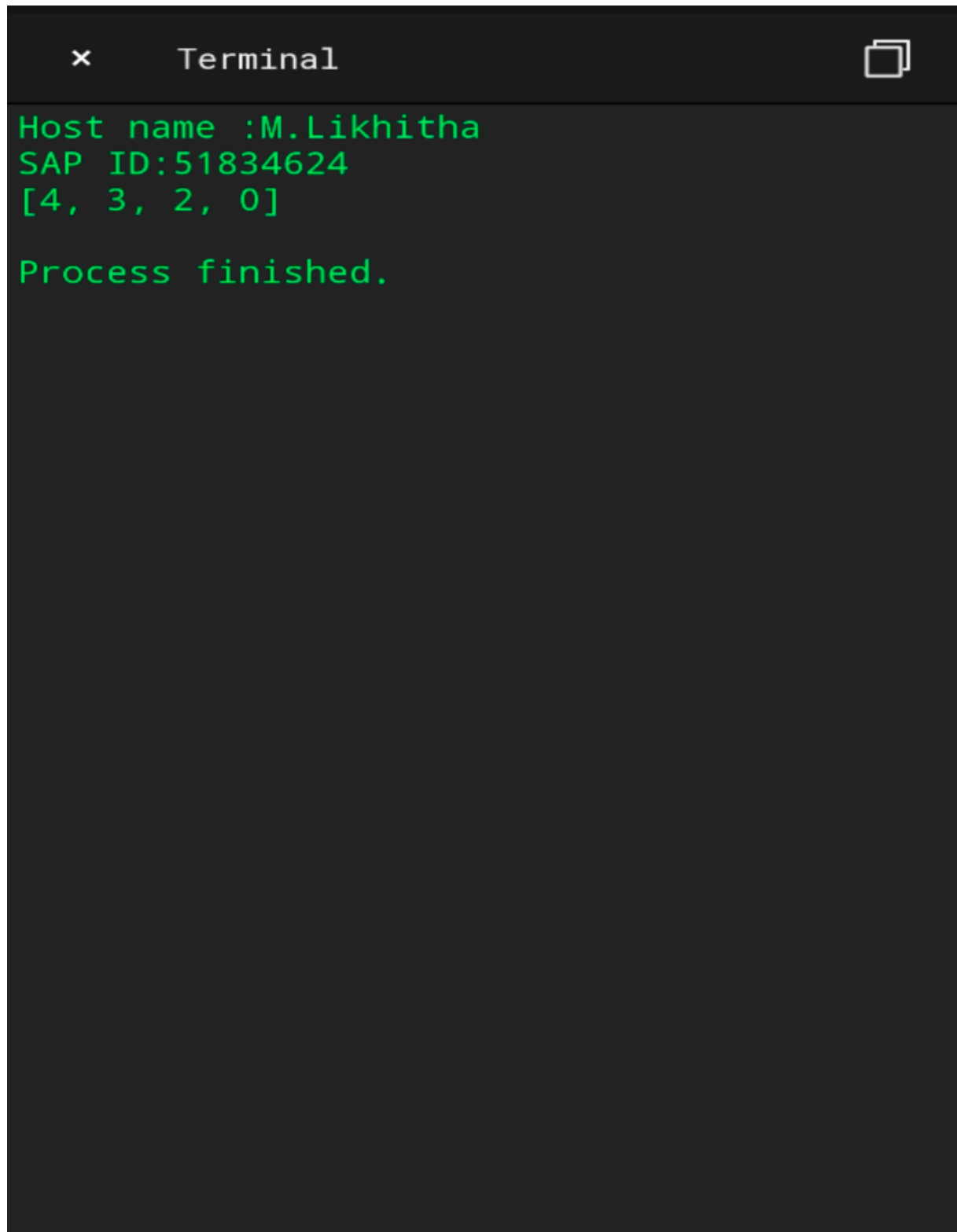
3rd Question :

```java
import java.util.*;

class Main
{
    public static int[] remove(int[] x, int ke

        List<Integer> result = new ArrayList<>(

        for (int y: x) {
            if (y != key) {
                result.add(y);
            }
        }

        return result.stream()
                    .mapToInt(Integer::intValue)
                    .toArray();
    }

    public static void main(String[] args) {
        int[] x = { 1, 4, 1, 3, 1, 2, 1, 0 };
        int key = 1;

        x = remove(x, key);
        System.out.println("Author:M.Likhitha\r
        System.out.println(Arrays.toString(x));
    }
}
```

Output Screen :

```
 ×        Terminal                        ▣

Host name :M.Likhitha
SAP ID:51834624
[4, 3, 2, 0]

Process finished.
```
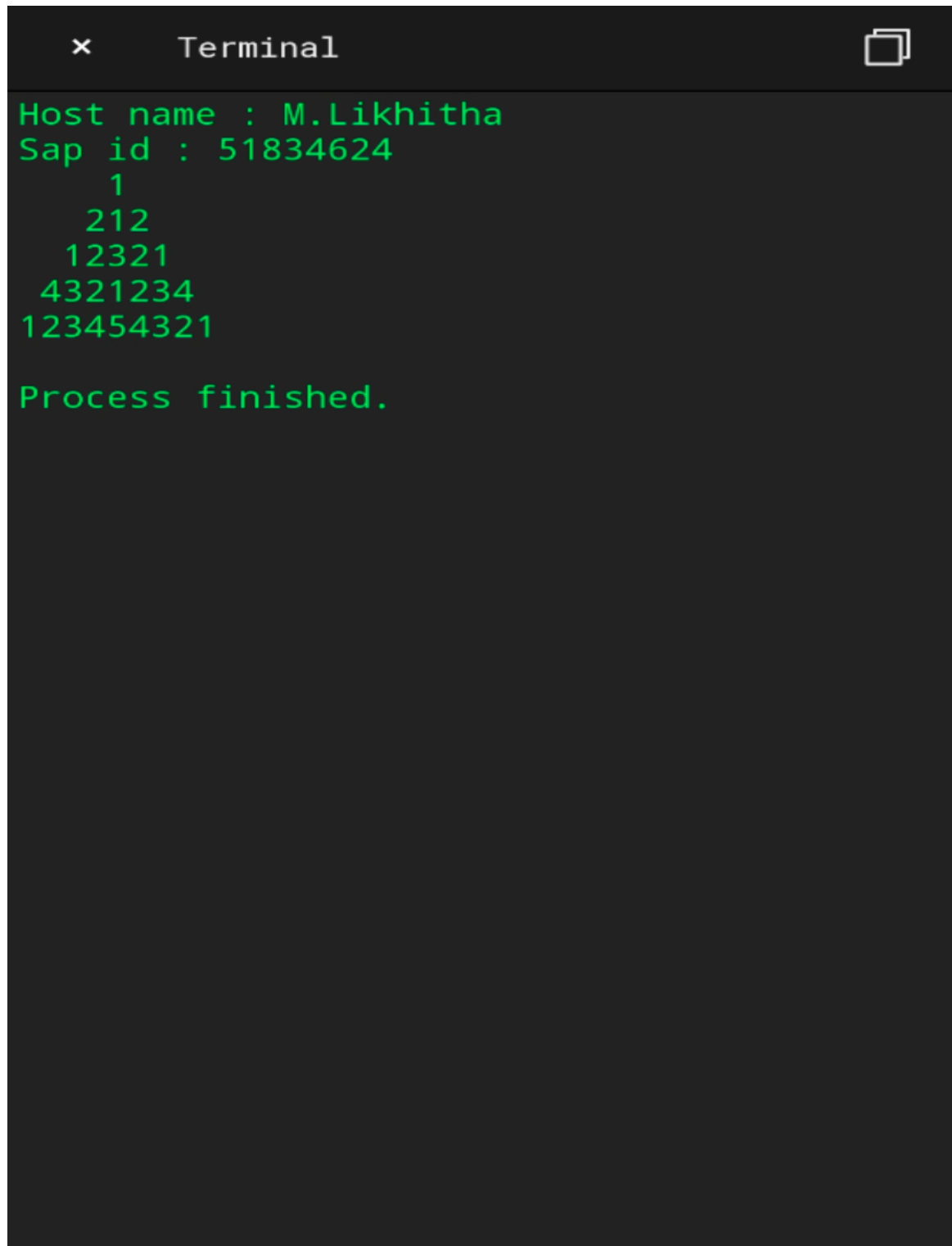
4th Question :

```java
public class Main
{
  public static void main(String[] args)
  {
     System.out.println("Host name : M.Likhitha
        int i,j,k;
        for(i=1;i<=5;i++)
        {
            for(j=5;j>i;j--)
            {
                System.out.print(" ");
            }
            if(i%2!=0){
                for(j=1,k=1;j<=2*i-1;j++)
                {
                    if(j<i)  {
                        System.out.print(k);
                        k++;
                    }
                    else {
                        System.out.print(k);
                        k--;
                    }
                }
            }
            else {
                for(j=1,k=i;j<=2*i-1;j++)
                {
                    if(j<i)
                    {
                        System.out.print(k);
                        k--;
                    }
                    else
                    {
                        System.out.print(k);
                        k++;
                    }
                }
                }
            System.out.println();
        } }}
```

Output Screen :

```
✕        Terminal                            ⧉

Host name : M.Likhitha
Sap id : 51834624
     1
   212
  12321
 4321234
123454321

Process finished.
```

Marks in mcq test : 16/20

Grade : 8/10