J cheran kumar

Java 1

Sap id : 51834769

Answers.....

1)

```java
import java.util.*;

class Height
{
        private int feet;
        private int inches;

        public void getDistance()
        {
                Scanner sc=new Scanner(System.in);

                System.out.print("Enter feet: ");
                feet=sc.nextInt();
                System.out.print("Enter inches: ");
                inches=sc.nextInt();
        }
```

```java
public void showDistance()

{

        System.out.println("Feet: "+ feet + "\tInches: "+ inches);

}


public void addDistance(Height H1, Height H2)

{

        inches=H1.inches+H2.inches;

        feet=H1.feet+H2.feet+(inches/12);

        inches=inches%12;

}
}


public class Main

{

        public static void main(String []s)

        {

                try

                {


                        Height H1=new Height();

                        Height H2=new Height();

                        Height H3=new Height();


                        //read first Height
```

```java
System.out.println("Author:J. Cheran kumar\nSAP ID:51834769");

System.out.println("Enter first Height:");

H1.getDistance();


//read second Height

System.out.println("Enter second Height:");

H2.getDistance();


//add heights

H3.addDistance(H1,H2);

//print Height

System.out.println("Total Height is:");

H3.showDistance();
        }
        catch (Exception e)
        {
                System.out.println("Exception occurred :"+ e.toString());
        }
    }
}
```



```
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Author:J.Cheran kumar
SAP ID:51834769
Enter first Height:
Enter feet: 6
Enter inches: 72
Enter second Height:
Enter feet: 5
Enter inches: 60
Total Height is:
Feet: 22 Inches: 0

Process finished.
```

2)

```
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 CHAIR");
```

```java
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" + numOf_legs);

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 BOOKSHELF");

System.out.println

("==================================");
```

```java
System.out.println("Color is" + color);

System.out.println("Width is" + width);

System.out.println("Height is" + height);

System.out.println("Number of shelves is" + numOf_shelves);

System.out.println(" ");

}

}


class FurnitureDemo {

public static void main(String[] args) {

Bookshelf b1 = new Bookshelf();

b1.accept();

b1.display();



chair c1 = new chair ();

c1.accept();

c1.display();



}

}
```
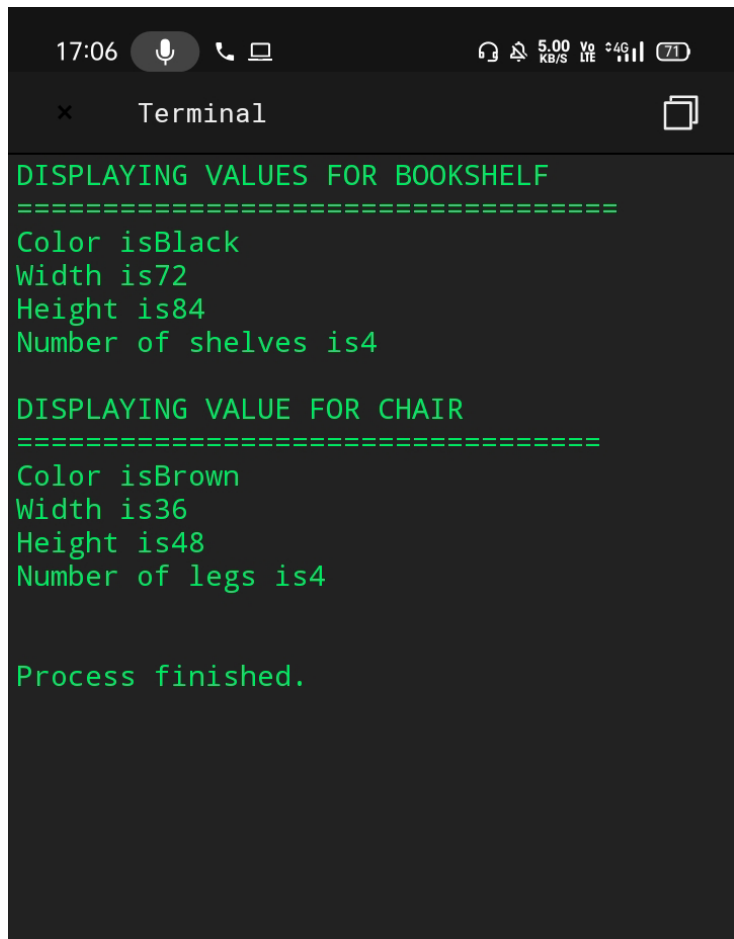
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DISPLAYING VALUES FOR BOOKSHELF
===================================
Color isBlack
Width is72
Height is84
Number of shelves is4

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


Process finished.
```

3)

```java
import java.util.*;

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

        List<Integer> result = new ArrayList<>();

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

        return result.stream()
                        .mapToInt(Integer::intValue)
                        .toArray();
    }
```
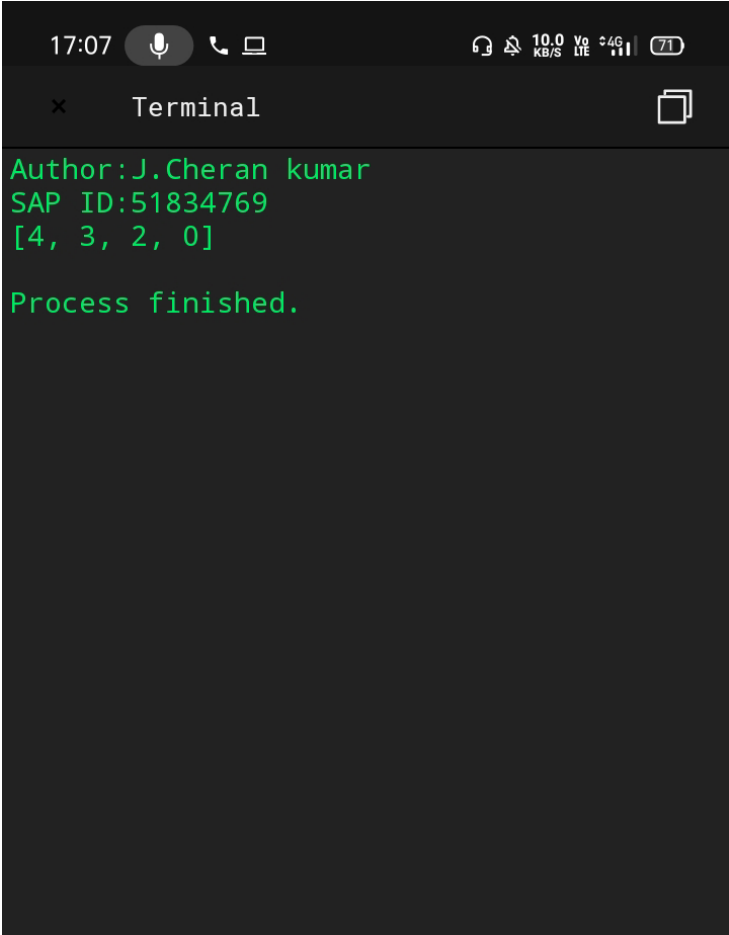
```java
public static void main(String[] args) {

        int[] x = { 1, 4, 1, 3, 1, 2, 1, 0 };

        int key = 1;


        x = remove(x, key);

        System.out.println("Author:J. Cheran kumar\nSAP ID:51834769");

        System.out.println(Arrays.toString(x));

    }

}
```



```
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Author:J.Cheran kumar
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[4, 3, 2, 0]

Process finished.
```

4)

```java
import java.util.*;

public class PalindromePattern

{

   public static void main(String[] args)

   {

      int i,j,k;

      Scanner sc=new Scanner(System.in);

      System.out.println("enter no.of rows");

      int n=sc.nextInt();
```

```java
for(i=0; i<n; i++)

{

  //inotializing k as one

   k=1;

   for(j=0; j<(n+i); j++)

   {

     if(j<n-i-1)

     //prints space in the less than n-i-2 places

        System.out.print(" ");

     else

     {
```

```java
            // else prints k

        System.out.print(+ k);

        if(j<(n-1))

        //  if j is greater than n-1

        //increases to k+1

            k++;

        else

        //if not k as k-1

            k--;

    }

}

System.out.println(" ");
```

```
        }



        }


    }
```

```
enter no.of rows
3
    1
  121
12321

Process finished.
```

5)

```java
import java.util.Scanner;

public class DemoTranslation {
public static void main(String[] args) {
int n;
float sum;
int count;

System.out.print("\nEnter total number of terms :: ");
n = STDIN_SCANNER.nextInt();

sum = 0.0f;

count = 1;
for(int i = 1; i <= n; i++) {
sum = sum + (float)Math.pow(count, 2) / (float)Math.pow(count, 3);
count += 2;
}
```

System.out.printf("\nSum of the series is :: %f\n", sum);

}

public final static Scanner STDIN_SCANNER = new Scanner(System.in);

}

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Enter total number of terms :: 4

Sum of the series is :: 1.676191

Process finished.