```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();
    }
    public void showDistance()
```

```
17      public void showDistance()
18      {
19          System.out.println("Feet: "+ feet + "\tInches: "+ inches);
20      }
21
22      public void addDistance(Height H1, Height H2)
23      {
24          inches=H1.inches+H2.inches;
25          feet=H1.feet+H2.feet+(inches/12);
26          inches=inches%12;
27      }
28  }
29
30  public class Main
31  {
32      public static void main(String []s)
33      {
```

```
34      try
35      {
36
37          Height H1=new Height();
38          Height H2=new Height();
39          Height H3=new Height();
40
41          //read first Height
42          System.out.println("Author:P.Kathyayani\nSAP ID:51834723");
43          System.out.println("Enter first Height: ");
44          H1.getDistance();
45
46          //read second Height
47          System.out.println("Enter second Height: ");
48          H2.getDistance();
49
```

```
50            //add heights
51            H3.addDistance(H1,H2);
52            //print Height
53            System.out.println("Total Height is:" );
54            H3.showDistance();
55        }
56        catch (Exception e)
57        {
58            System.out.println("Exception occurred :"+ e.toString());
59        }
60    }
61 }
```

```
Author:P.Kathyayani
SAP ID:51834723
Enter first Height:
Enter feet: 23
Enter inches: 34
Enter second Height:
Enter feet: 34
Enter inches: 23
Total Height is:
Feet: 61Inches: 9

Process finished.
```

```
1  abstract class Furniture {
2
3    protected String color;
4    protected int width;
5    protected int height;
6    public abstract void accept();
7    public abstract void display();
8   }
9     class chair extends Furniture {
10   private int numOf_legs;
11
12   public void accept() {
13
14   color = "Brown";
15   width = 36;
16   height = 48;
```

```
17   numOf_legs = 4;
18  }
19     public void display()    {
20
21   System.out.println("DISPLAYING VALUE FOR CHAIR");
22   System.out.println("==================================");
23   System.out.println("Color is" + color);
24   System.out.println("Width is" + width);
25   System.out.println("Height is" + height);
26   System.out.println("Number of legs is" + numOf_legs);
27   System.out.println(" ");
28   }
29  }
30
31  class Bookshelf extends Furniture {
32
33   private int numOf_shelves;
```

```
35   public void accept()  {
36
37    color ="Black";
38    width = 72;
39    height = 84;
40    numOf_shelves = 4;
41   }
42   public void display ()  {
43    System.out.println("DISPLAYING VALUES FOR BOOKSHELF");
44    System.out.println
45   ("====================================");
46
47   System.out.println("Color is" + color);
48   System.out.println("Width is" + width);
49   System.out.println("Height is" + height);
50   System.out.println("Number of shelves is" + numOf_shelves);
51   System.out.println(" ");
```


Make public

```
51    System.out.println(    );
52    }
53  }
54
55  class FurnitureDemo  {
56   public static void main(String[] args)   {
57    Bookshelf b1 = new Bookshelf();
58    b1.accept();
59    b1.display();
60
61
62    chair c1 = new chair ();
63    c1.accept();
64    c1.display();
65
66  }
67  }
```

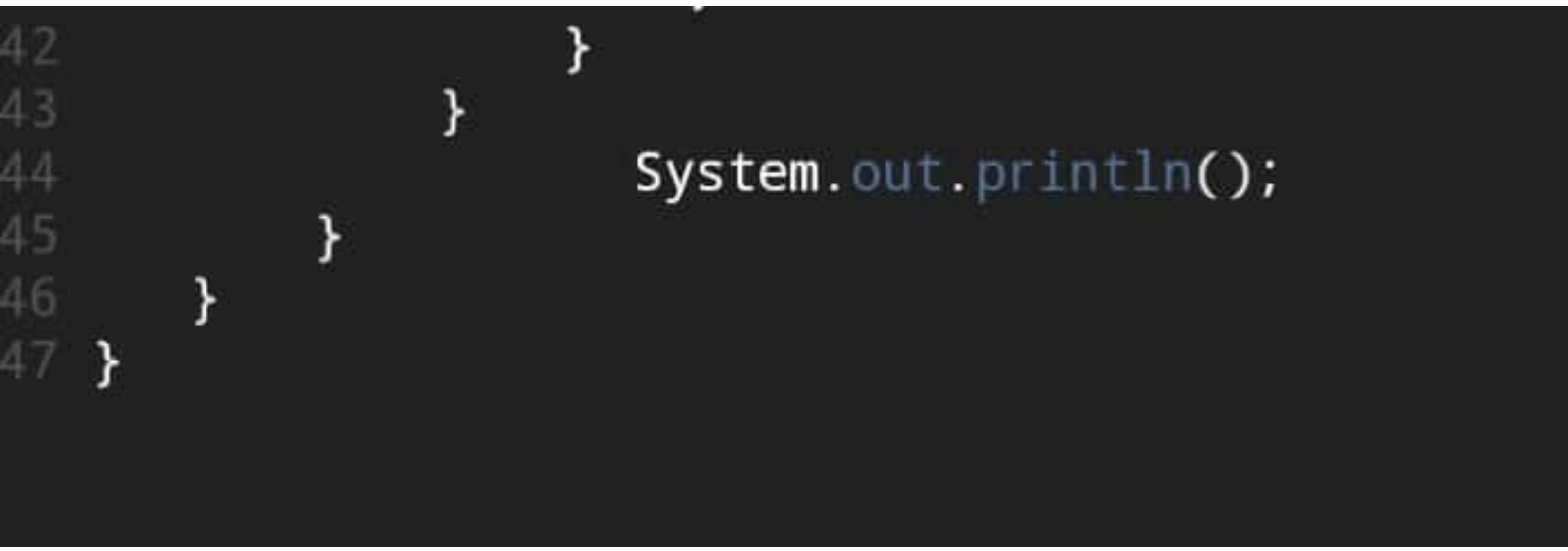
```
DISPLAYING VALUES FOR BOOKSHELF
================================
Color isBlack
Width is72
Height is84
Number of shelves is4

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


Process finished.
```

```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();
  }

  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:P.Kathyayani");
    System.out.println("SAP ID:51834723");
    System.out.println(Arrays.toString(x));
  }
}
```

Terminal

```
Author:P.Kathyayani
SAP ID:51834723
[4, 3, 2, 0]

Process finished.
```

```java
public class Main
{
    public static void main(String[] args)
    {
        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++;
                    }
```



```
    1
   212
  12321
 4321234
123454321

Process finished.
```

315.java

Saved

```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;

```

```
17
18 count = 1;
19 for(int i = 1; i <= n; i++) {
20 sum = sum + (float)Math.pow(count, 2) / (float)Math.pow(count, 3);
21 count += 2;
22 }
23
24 System.out.printf("\nSum of the series is :: %f\n", sum);
25 }
26
27 public final static Scanner STDIN_SCANNER = new Scanner(System.in);
28 }
```

```
Enter total number of terms :: 3

Sum of the series is :: 1.533333

Process finished.
```