```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()
 {
  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
   System.out.println("Author:B.Vishnu priya\nSAP
ID:51834736");
   System.out.println("Enter first Height: ");
   H1.getDistance();

```

```
  {
   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
   System.out.println("Author:B.Vishnu priya\nSAP
ID:51834736");
   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());
  }
 }
}
```

```
Author:B.Vishnu priya
SAP ID:51834736
Enter first Height:
Enter feet: 5
Enter inches: 4
Enter second Height:
Enter feet: 6
Enter inches: 1
Total Height is:
Feet: 11 Inches: 5

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:B.Vishnu priya\nSAP ID:51834736");
  System.out.println(Arrays.toString(x));
 }
}
```

```
Author:B.Vishnu priyaa
SAP ID:51834736
[4, 3, 2, 0]

Process finished.
```

```
  public void accept() {

  color = "Brown";
  width = 36;
  height = 48;
  numOf_legs = 4;
 }
    public void display()    {
  System.out.println("DISPLAYING VALUE FOR
CHAIR");

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

  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(" ");
  }
```

```
    }
    public void display ()  {
     System.out.println("DISPLAYING VALUES FOR
BOOKSHELF");
     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 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();

   }
   }
```

```
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
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++;
                 }
             }
         }
           System.out.println();
     }
 }
}
```

```
    1
   212
  12321
 4321234
123454321

Process finished.
```