

```

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();

```

```

18     {
19         System.out.println("Feet: " + feet + "\tInches:
20         "+ inches);
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:B.Vishnu priya\nSAP
ID:51834736");
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 :"+
59             e.toString());
60         }
61     }
62 }

```

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.

```
1 import java.util.*;
2
3 class Main
4 {
5     public static int[] remove(int[] x, int key) {
6
7         List<Integer> result = new ArrayList<>();
8
9         for (int y: x) {
10             if (y != key) {
11                 result.add(y);
12             }
13         }
14
15         return result.stream()
16             .mapToInt(Integer::intValue)
17             .toArray();
18     }
19
20     public static void main(String[] args) {
21         int[] x = { 1, 4, 1, 3, 1, 2, 1, 0 };
22         int key = 1;
23
24         x = remove(x, key);
25         System.out.println("Author:B.Vishnu priya\nSAP
ID:51834736");
26         System.out.println(Arrays.toString(x));
27     }
28 }
29
```

Author:B.Vishnu priyaa

SAP ID:51834736

[4, 3, 2, 0]

Process finished.


```

12 public void accept() {
13
14     color = "Brown";
15     width = 36;
16     height = 48;
17     numOf_legs = 4;
18 }
19     public void display()    {
20         System.out.println("DISPLAYING VALUE FOR
CHAIR");
21
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     class Bookshelf extends Furniture {
31
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
BOOKSHELF");
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" +
numOf_shelves);
50             System.out.println(" ");
51         }

```

```

0 }
1 public void display () {
2     System.out.println("DISPLAYING VALUES FOR
BOOKSHELF");
3     System.out.println
4     ("=====");
5
6     System.out.println("Color is" + color);
7     System.out.println("Width is" + width);
8     System.out.println("Height is" + height);
9     System.out.println("Number of shelves is" +
numOf_shelves);
0     System.out.println(" ");
1 }
2 }

4 class FurnitureDemo {
5     public static void main(String[] args) {
6         Bookshelf b1 = new Bookshelf();
7         b1.accept();
8         b1.display();

9
0
1         chair c1 = new chair ();
2         c1.accept();
3         c1.display();
4
5     }
6 }

```

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.

|


```

1 public class Main
2 {
3     public static void main(String[] args)
4     {
5         int i,j,k;
6         for(i=1;i<=5;i++)
7         {
8             for(j=5;j>i;j--)
9             {
10                System.out.print(" ");
11            }
12            if(i%2!=0)
13            {
14                for(j=1,k=1;j<=2*i-1;j++)
15                {
16                    if(j<i)
17                    {
18                        System.out.print(k);
19                        k++;
20                    }
21                    else
22                    {
23                        System.out.print(k);
24                        k--;
25                    }
26                }
27            }
28            else
29            {
30                for(j=1,k=i;j<=2*i-1;j++)
31                {
32                    if(j<i)
33                    {
34                        System.out.print(k);
35                        k--;
36                    }
37                    else
38                    {
39                        System.out.print(k);
40                        k++;
41                    }
42                }
43            }
44            System.out.println();
45        }
46    }
47 }

```

```
1
212
12321
4321234
123454321
```

Process finished.