

```
1 import java.util.*;
2
3 class Height
4 {
5     private int feet;
6     private int Inches;
7
8     public void getDistance()
9     {
10         Scanner sc=new Scanner(System.in);
11
12         System.out.print("Enter feet: ");
13         feet=sc.nextInt();
14         System.out.print("Enter inches: ");
15         Inches=sc.nextInt();
16     }
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:K.Sudarshan Reddy\nSAP ID:51834730");
43             System.out.println("Enter first Height: ");
44             H1.getDistance();
```



```
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:K.Sudarshan Reddy\nSAP ID:51834730");
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 }
```



1

212

12321

4321234

123454321

**Process finished.**

java---4.java 

Saved

```
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 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     }
}
```



```
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:K.Sudarshan Reddy\nSAP ID:51834730");
26        System.out.println(Arrays.toString(x));
27    }
28 }
```



## **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---2.java



Saved

```
23 System.out.println("Width is" + width);
24 System.out.println("Height is" + height);
25 System.out.println("Number of legs is" + numOf_legs);
26 System.out.println(" ");
27 }
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             ("Color is" + color + ", Width is" + width + ", Height is" + height + ", Number of legs is" + numOf_legs + ", Number of shelves is" + numOf_shelves);
```

```
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        System.out.println("DISPLAYING VALUE FOR CHAIR");  
21        System.out.println("_____");  
22        System.out.println("Color is " + color);  
23        System.out.println("Width is " + width);  
24        System.out.println("Height is " + height);  
25        System.out.println("Number of legs is " + numOf_legs);  
26        System.out.println(" ");  
27    }  
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 }
```

**Author:K.Sudarshan Reddy**

**SAP ID:51834730**

**Enter first Height:**

**Enter feet: 5**

**Enter inches: 6**

**Enter second Height:**

**Enter feet: 4**

**Enter inches: 8**

**Total Height is:**

**Feet: 10 Inches: 2**

**Process finished.**