



```

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
10     class chair extends Furniture {
11
12         private int numOf_legs;
13
14         public void accept() {
15
16             color = "Brown";
17             width = 36;
18             height = 48;
19             numOf_legs = 4;
20         }
21
22         public void display() {
23             System.out.println("DISPLAYING VALUE FOR CHAIR");
24             System.out.println("=====");
25             System.out.println("Color is" + color);
26             System.out.println("Width is" + width);
27             System.out.println("Height is" + height);
28             System.out.println("Number of legs is" + numOf
29             System.out.println(" ");
30         }
31     }
32
33     class Bookshelf extends Furniture {
34
35         private int numOf_shelves;
36
37         public void accept() {
38
39             color = "Black";
40             width = 72;
41             height = 84;
42             numOf_shelves = 4;
43         }
44
45         public void display () {
46             System.out.println("DISPLAYING VALUES FOR BOOKSHELF");
47             System.out.println("=====");
48         }
49     }
50 }

```

⋮ Make public  

```

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

```

## 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  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.Naveen kumar");
26          System.out.println(Arrays.toString(x));
27      }
28 }
```

```
Author:B.Naveen kumar  
SAP ID:51834546  
[4, 3, 2, 0]
```

```
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                    }

```

```
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.
|
```



# JAVA\_QUIZ\_DAY\_12

Attempts allowed: 1

This quiz opened at Friday, 31 July 2020,  
3:00 PM

This quiz will close at Friday, 31 July  
2020, 5:00 PM

Time limit: 30 mins

## SUMMARY OF YOUR PREVIOUS ATTEMPTS

	Marks /	Grade /	
State	20.00	10.00	Review
Finished	16.00	8.00	
Submitted			
Friday, 31 July 2020, 3:50 PM			

YOUR FINAL GRADE  
FOR THIS QUIZ IS