```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: "+
   }

   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)
   {
     System.out.println("Question no:1\nAuthor:B.padma
     try
     {

       Height H1=new Height();
       Height H2=new Height();
       Height H3=new Height();

       //read first Height
       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.to
     }
   }
}
```

```
Question no:1
Author:B.padmasai
Sap id:51834617
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.
```

```java
1  import java.util.Scanner;
2  class Furniture extends Fur{
3  public static void main(String args[])
4  {
5    System.out.println("Question no:2\nAuthor:B.padmasa
6  Scanner scan = new Scanner(System.in);
7  System.out.println("Welcome to furniture world");
8  System.out.println("enter your name");
9  String name = scan.nextLine();
10 System.out.println("customer name: "+name);
11 Fur s = new Fur();
12 s.getInput();
13 }
14 }
15 class Fur{
16   Scanner scan = new Scanner(System.in);
17   int choice;
18 public void getInput(){
19 System.out.println("select one option:");
20 System.out.println("1.Make an order");
21 System.out.println("2.exit");
22 System.out.println("enter any option");
23 int choice = scan.nextInt();
24 switch (choice){
25     case 1:
26         getDetails();
27         break;
28     case 2:
29         System.out.println("Thank you for visiting");
30         break;
31     default:
32         System.out.println("enter valid option");
33 }
34 }
35
36 public void getDetails(){
37 System.out.println("Furniture World");
38 System.out.println("Available stock");
39 System.out.println("1.Chair");
40 System.out.println("2.beds");
41 System.out.println("3.shelves");
42 System.out.println("enter any option");
43 choice=scan.nextInt();
44 switch(choice){
45 case 1:
46         getChair();
47         getInput();
48         break;
49     case 2:
50         getBed();
51         getInput();
52         break;
53     case 3:
54         getShelves();
55         getInput();
56     default:
57         System.out.println("enter valid option");
58
59 }
60 }
61 public void getChair(){
62 System.out.println("which type of chair you want");
63 String type = scan.nextLine();
64 System.out.println("any specifications or changes(if
65 String spec = scan.nextLine();
66 System.out.println("How many number of chairs");
67 int num = scan.nextInt();
68 System.out.println("TYPE , SPECIFICATIONS , NUMBER");
69 System.out.println(type+" "+spec+" "+num);
70 }
71 public void getBed(){
72 System.out.println("which type of bed you want");
73 String typ = scan.nextLine();
74 System.out.println("any specifications or changes(if
75 String spe = scan.nextLine();
76 System.out.println("How many number of beds");
77 int nu = scan.nextInt();
78 System.out.println("TYPE , SPECIFICATIONS , NUMBER");
79 System.out.println(typ+" "+spe+" "+nu);
80 }
81 public void getShelves(){
82 System.out.println("which type of shelve you want");
83 String types = scan.nextLine();
84 System.out.println("any specifications or changes(if
85 String specs = scan.nextLine();
86 System.out.println("How many number of shelves");
87 int numb = scan.nextInt();
88 System.out.println("TYPE , SPECIFICATIONS , NUMBER");
89 System.out.println(types+" "+specs+" "+numb);
90 }
91 }
```

```
Question no:2
Author:B.padmasai
Sap id:51834617
Welcome to furniture world
enter your name
sai
customer name: sai
select one option:
1.Make an order
2.exit
enter any option
1
Furniture World
Available stock
1.Chair
2.beds
3.shelves
enter any option
2
which type of bed you want
any specifications or changes(if no please ent
no
How many number of beds
2
TYPE , SPECIFICATIONS , NUMBER
 no 2
select one option:
1.Make an order
2.exit
enter any option
```
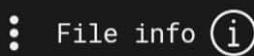
```java
public class Main
{
    public static void main(String[] args)
    {
        System.out.println("Question no:4\nAuthor:B.padm
        int i,j,k;
        for(i=1;i<=5;i++)
        {
            for(j=5;j>i;j--)
            {
                System.out.print(" ");
            }
            if(i%2!=0)
            {
                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();
            }
        }
    }
}
```

```
Question no:4
Author:B.padmasai
Sap id:51834617
      1
    212
   12321
  4321234
123454321

Process finished.
```

```java
import java.util.Scanner;

public class DemoTranslation
  {
    public static void main(String[] args)
    {
       System.out.println("Question no:5\nAuthor:B.padi
       int n;
       float sum;
       int count;
    System.out.print("Enter total number of terms : "
    n = STDIN_SCANNER.nextInt();
    sum = 0.0f;
    count = 1;
    for(int i = 1; i <= n; i++)
      {
    sum = sum + (float)Math.pow(count, 2) / (float)Matl
    count += 2;
      }
System.out.printf("Sum of the series is: %f", sum);
    }
public final static
Scanner STDIN_SCANNER = new Scanner(System.in);
}
```

```
Question no:5
Author:B.padmasai
Sap id:51834617
Enter total number of terms : 3
Sum of the series is: 1.533333
Process finished.
```