```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 + "\tInche
    }

    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();

            System.out.println("Author : J Sri Sai Man
            System.out.println("SAP ID : 51834596");
            System.out.println("Enter first Height: ")
            H1.getDistance();

            System.out.println("Enter second Height: "
            H2.getDistance();

            H3.addDistance(H1,H2);

            System.out.println("Total Height is:" );
            H3.showDistance();
        }
        catch (Exception e)
        {
            System.out.println("Exception occurred :"+
        }
    }
}
```

```
× Terminal                                    ⧉

Author : J Sri Sai Manoj
SAP ID : 51834596
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
import java.util.Scanner;
class Furniture extends Fur
{
public static void main(String args[])
{
Scanner scan = new Scanner(System.in);
System.out.println("Author : J Sri Sai Manoj");
System.out.println("SAP ID : 51834596");
System.out.println("Welcome to furniture world");
System.out.println("Enter your name:");
String name = scan.nextLine();
System.out.println("customer name: "+name);
Fur s = new Fur();
s.getInput();
}
}
class Fur
{
   Scanner scan = new Scanner(System.in);
   int choice;
public void getInput()
{
System.out.println("select one option:");
System.out.println("1.Make an order");
System.out.println("2.exit");
System.out.println("Enter any option");
int choice = scan.nextInt();
switch (choice)
{
    case 1:
        getDetails();
        break;
    case 2:
        System.out.println("Thank you for visiti
        break;
     default:
        System.out.println("Enter valid option")
}
}
public void getDetails()
{
System.out.println("Furniture World");
System.out.println("Available stock");
System.out.println("1.Chair");
System.out.println("2.beds");
System.out.println("3.shelves");
System.out.println("Enter any option");
choice=scan.nextInt();
switch(choice)
{
case 1:
        getChair();
        getInput();
        break;
    case 2:
        getBed();
        getInput();
        break;
    case 3:
         getShelves();
         getInput();
     default:
        System.out.println("Enter valid option:
}
}
public void getChair()
{
scan.nextLine();
System.out.println("Which type of chair you want
String type = scan.nextLine();
System.out.println("Any specifications or change
String spec = scan.nextLine();
System.out.println("How many number of chairs: "
int num = Integer.parseInt(scan.nextLine());
System.out.println("TYPE , SPECIFICATIONS , NUME
System.out.println(type+" "+spec+" "+num);
}
public void getBed()
{
scan.nextLine();
System.out.println("Which type of bed you want:
String typ = scan.nextLine();
System.out.println("Any specifications or change
String spe = scan.nextLine();
System.out.println("How many number of beds: ");
int nu = scan.nextInt();
System.out.println("TYPE , SPECIFICATIONS , NUME
System.out.println(typ+" "+spe+" "+nu);
}
public void getShelves()
{
scan.nextLine();
System.out.println("Which type of shelve you war
String types = scan.nextLine();
System.out.println("Any specifications or change
String specs = scan.nextLine();
System.out.println("How many number of shelves:
int numb = scan.nextInt();
System.out.println("TYPE , SPECIFICATIONS , NUME
System.out.println(types+" "+specs+" "+numb);
}
}
```

```
Author : J Sri Sai Manoj
SAP ID : 51834596
Welcome to furniture world
Enter your name:
manoj
customer name: manoj
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:
spring
Any specifications or changes(if no please
no
How many number of beds:
1
TYPE , SPECIFICATIONS , NUMBER
spring no 1
select one option:
1.Make an order
2.exit
Enter any option
2
Thank you for visiting

Process finished.
```

```java
public class Pattern
{
  public static void main(String[] args) {
    System.out.println("Author : J Sri Sai Manoj
    System.out.println("SAP ID : 51834596");
      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();
      }
  }
}
```

```
Author : J Sri Sai Manoj
SAP ID : 51834596
        1
      212
     12321
    4321234
   123454321

Process finished.
```

```java
import java.util.Scanner;
public class DemoTranslation {
public static void main(String[] args) {
System.out.println("Author : J Sri Sai Manoj");
System.out.println("SAP ID : 51834596");
Scanner sc = new Scanner(System.in);
int n;
float sum;
int count;
System.out.print("\nEnter total number of terms:
n = sc.nextInt();
sum = 0.0f;
count = 1;
for(int i = 1; i <= n; i++) {
sum = sum + (float)Math.pow(count, 2) / (float)M
count += 2;
}
System.out.printf("\nSum of the series is : %f\r
}
}
```

Terminal

```
Author : J Sri Sai Manoj
SAP ID : 51834596

Enter total number of terms: 5

Sum of the series is : 1.787302

Process finished.
```