1stAnswer31_07_20.java

Saved

```java
//1st answer

import java.util.*;

 // Compiler version JDK 11.0.2

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 + "\nInches:
  }

  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:P.Hemanth\nSAP ID:
      System.out.println("Enter Height 1");
      H1.getDistance();

      //read second Height
```

1stAnswer31_07_20.java

Saved

```
    feet=sc.nextInt();
    System.out.print("Enter inches: ");
    inches=sc.nextInt();
  }
  public void showDistance()
  {
    System.out.println("Feet: "+ feet + "\nInches:
  }

  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:P.Hemanth\nSAP ID:
      System.out.println("Enter Height 1");
      H1.getDistance();

      //read second Height
      System.out.println("Enter Height 2 ");
      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.
    }
  }
}
```

Terminal

```
Author:P.Hemanth
SAP ID:51834553
Enter Height 1
Enter feet: 5
Enter inches: 9
Enter Height 2
Enter feet: 5
Enter inches: 2
Total Height is:
Feet: 10
Inches: 11

Process finished.
```

2ndAnswer31_07_20.java

Saved

```java
//2nd answer
//author:P.Hemanth
//sap.id:51834553

import java.util.*;

 // Compiler version JDK 11.0.2

 abstract class Furniture {

  protected String color;
  protected int width;
  protected int height;
  public abstract void accept();
  public abstract void display();
 }
     class chair extends Furniture {
  private int numOf_legs;

  public void accept() {

  color = "Red";
  width = 28;
  height = 40;
  numOf_legs = 4;
 }
    public void display()    {
  System.out.println("DISPLAYING VALUE FOR CHAIR");
  System.out.println("==============================
  System.out.println("Color is " + color);
  System.out.println("Width is " + width);
  System.out.println("Height is " + height);
  System.out.println("Number of legs is " + numOf_l
  System.out.println(" ");
  }
 }

 class Bookshelf extends Furniture {

  private int numOf_shelves;

  public void accept()  {

   color ="Black";
   width = 80;
   height = 100;
   numOf_shelves = 9;
  }
  public void display ()  {
   System.out.println("DISPLAYING VALUES FOR BOOKSH
```

2ndAnswer31_07_20.java

Saved

```
 }
}

class Bookshelf extends Furniture {

 private int numOf_shelves;

 public void accept()  {

  color ="Black";
  width = 80;
  height = 100;
  numOf_shelves = 9;
 }
 public void display ()  {
  System.out.println("DISPLAYING VALUES FOR BOOKSH
  System.out.println
 ("====================================");

 System.out.println("Color is " + color);
 System.out.println("Width is " + width);
 System.out.println("Height is " + height);
 System.out.println("Number of shelves is " + numC
 System.out.println(" ");
 }

}

class FurnitureDemo  {
 public static void main(String[] args)   {
   Scanner sc= new Scanner(System.in);
   System. out. println("enter your name: ");
     String name=sc.nextLine();
   System. out. println("enter your address: ");
      String address=sc.nextLine();
  Bookshelf b1 = new Bookshelf();
  b1.accept();
  b1.display();


  chair c1 = new chair ();
  c1.accept();
  c1.display();

 }
 }
```

Terminal

```
enter your name:
p. hemu
enter your address:
Vijayawada, near radio station, 8/9
DISPLAYING VALUES FOR BOOKSHELF
==================================
Color is Black
Width is 80
Height is 100
Number of shelves is 9

DISPLAYING VALUE FOR CHAIR
==================================
Color is Red
Width is 28
Height is 40
Number of legs is 4


Process finished.
```

3rdAnswer31_07_20.java

Saved

```java

//3rd answer

import java.util.*;

 // Compiler version JDK 11.0.2

class EvenOccurence
{
  public static int[] remove(int[] x, int key) {

    List<Integer> result = new ArrayList<>();

    for (int y: x) {
      if (y != key) {
        result.add(y);
      }
    }

    return result.stream()
          .mapToInt(Integer::intValue)
          .toArray();
  }

  public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    System. out. println("author:P.Hemanth\nsap.id:
    System. out. println("enter the size of the arr
      int size=sc.nextInt();
      int x[]=new int[size];
    System. out. println("enter "+size+" elements:
      for(int i=0;i<size;i++){
        x[i]=sc.nextInt();
      }
     System. out. println("enter no. of occurrence:
     int key=sc.nextInt();


     x = remove(x, key);
    System.out.println(Arrays.toString(x));



  }
}

```

Terminal

```
author:P.Hemanth
sap.id:51834553
enter the size of the array:
3
enter 3 elements:
1
2
3
enter no. of occurrence:
4
[1, 2, 3]

Process finished.
```

4thAnswer31_07_20.java

Saved

```java

//4th answer
import java.util.*;

 // Compiler version JDK 11.0.2

public class Pyramid
{
  public static void main(String[] args)
  {
    Scanner sc=new Scanner(System.in);
    System. out.println("author:P.Hemanth\nsap.id:5
    System. out. println("Enter no. of rows: ");
      int number=sc.nextInt();
      int i,j,k;
      for(i=1;i<=number;i++)
      {
          for(j=number;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++;
```

Terminal

```
author:P.Hemanth
sap.id:51834553
Enter no. of rows:
5
    1
   212
  12321
 4321234
123454321

Process finished.
```

5thAnswer31_07_20.java

Saved

```java

//5th answer

import java.util.*;

 // Compiler version JDK 11.0.2


public class Numbers{

    // Function to return the sum of the series

    public static float getSum(int a, int n)

    {

        // variable to store the answer

        float sum = 0;

        for (int i = 1; i <= n; ++i) {


            // Math.pow(x, y) returns x^y

            sum += (i / Math.pow(a, i));

        }

        return sum;

    }

    public static void main(String[] args)

    {
      Scanner sc=new Scanner(System.in);
      System. out. println("author:P.Hemanth\nsap.i
      System. out. println("\nenter the number: ");
      int a=sc.nextInt();
      System. out. println("enter the last number:
      int n=sc.nextInt();




        // Print the sum of the series

        ln(getSum(a, n));
```

Terminal

```
author:P.Hemanth
sap.id:51834553

enter the number:
4
enter the last number:
5
0.4423828

Process finished.
```