1.

```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: "+ inches);
    }

    public void addDistance(Height H1, Height H2)
    {
```

Terminal

```
Author:P. Jaganmohan
SAP ID:51834796
Enter first Height:
Enter feet: 34
Enter inches: 23
Enter second Height:
Enter feet: 24
Enter inches: 65
Total Height is:
Feet: 65 Inches: 4

Process finished.
```

2.

```
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);
```

```
×    Terminal
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.
```

3.

```java
import java.util.*;

class Main
{
    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) {
        int[] x = { 1, 4, 1, 3, 1, 2, 1, 0 };
        int key = 1;

        x = remove(x, key);
        System.out.println("Author:P. Jaganmohan\nSAP ID:51
        System.out.println(Arrays.toString(x));
    }
}
```

```
Terminal
Author:P. Jaganmohan
SAP ID:51834796
[4, 3, 2, 0]

Process finished.
```

4.

```
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)
```

```
×    Terminal
   1
  212
 12321
4321234
123454321

Process finished.
```

5.

```java
import java.util.Scanner;

public class DemoTranslation {
public static void main(String[] args) {
int n;
float sum;
int count;



System.out.print("\nEnter 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)Math.pow(count,
count += 2;
}

System.out.printf("\nSum of the series is :: %f\n", sum);
}

public final static Scanner STDIN_SCANNER = new Scanner(
}
```

```
×    Terminal

Enter total number of terms :: 6

Sum of the series is :: 1.878211

Process finished.
```