

1.

```
1 public class Main
2 {
3     public static long factorial(int i)
4     {
5         return (i < 1) ? 1 : i * factorial(i - 1);
6     }
7
8     public static void main(String[] args)
9     {
10        System.out.println("Author:jaganmohan\nSAP ID:51834796");
11        int i = 5;
12        System.out.println("The Factorial of " + i + " is " + factor
13
14    }
15
```

× Terminal



```
Author:jaganmohan
SAP ID:51834796
The Factorial of 5 is 120
```

```
Process finished.
```

3.

```
1 abstract class Bank
2 {
3     abstract int getBalance();
4 }
5 class BankA extends Bank
6 {
7     int deposit=100;
8     int getBalance()
9     {
10         return deposit;
11     }
12 }
13 class BankB extends Bank
14 {
15     int deposit=150;
16     int getBalance()
17     {
18         return deposit;
19     }
20 }
21 class BankC extends Bank
22 {
23     int deposit=200;
24     int getBalance()
25     {
26         return deposit;
27     }
28 }
29 class Main
30 {
31     public static void main(String args[])
32     {
33         System.out.println("Balance in Bank A: " + BankA.getBalance());
34         System.out.println("Balance in Bank B: " + BankB.getBalance());
35         System.out.println("Balance in Bank C: " + BankC.getBalance());
36     }
37 }
```

x Terminal



Author: p. jaganmohan
SAP ID:51834796
Balance in Bank A: 100
Balance in Bank B: 150
Balance in Bank C: 200

4.

```
1 import java.util.Scanner;
2 class Pattern
3 {
4     public static void main(String args[])
5     {
6         Scanner sc=new Scanner(System.in);
7         for(int i=4;i>=1;i--)
8         {
9             for(int j=4;j>i;j--)
10            {
11                System.out.print(" ");
12            }
13            for(int j=2*i-1;j>=1;j--)
14            {
15                if(j%2==0)
16                {
17                    System.out.print("0");
18                }
19                else
20                {
21                    System.out.print("1");
22                }
23            }
24            System.out.println();
25        }
26    }
27 }
```

x Terminal



```
1010101
10101
101
1
```