Q-1

```java
import java.util.Scanner;

public class Question1 {

    public static int fact(int n) {
        if(n==0)
            return 1;

        return n*fact(n-1);
    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a number");
        int num=sc.nextInt();
        System.out.println("Factorial of a number is: "+fact(num));
    }

}
```

Q-2

```java
import java.util.Scanner;

public class Question2 {

    public static void fiboPattern(int n) {
        int a=0,b=1,c;
        for(int i=0;i<n;i++) {
            for(int j=0;j<=i;j++) {
                c=a+b;
                System.out.print(c+" ");
                a=b;
                b=c;
            }
            System.out.println(" ");
        }
    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter number of rows");
        int num=sc.nextInt();
        fiboPattern(num);
    }

}
```

Q-3

```java
public class Question3 {

    public static void patternOne() {
        for(int i=3;i>0;i--) {
            for(int s=1;s<=i-1;s++) {
                System.out.print(" ");
            }
            for(int j=3;j>=i;j--) {
                System.out.print(j);
            }
            for(int k=i+1;k<=3;k++)
                System.out.print(k);

            System.out.println();
        }

        for(int i=1;i<3;i++) {
            for(int s=1;s<=i;s++)
                System.out.print(" ");

            for(int j=3;j>=i+1;j--)
                System.out.print(j);

            for(int k=3;k>i+1;k--)
                System.out.print(k);

            System.out.println();
        }
    }

    public static void patternTwo(int n) {
        for(int i=0;i<n;i++) {
            for(int j=n;j>i;j--)
                System.out.print("*");
            System.out.println();
        }
    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        patternOne();
        patternTwo(4);
    }

}
```

Q-4

```java
import java.util.Scanner;

public class Question4 {

    public static void revBinary(int n) {
        if(n==0) {
            return;
        }

        int rem=n%2;
        System.out.print(rem);
        revBinary(n/2);
    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a number");
        int num=sc.nextInt();
        if(num==0)
            System.out.println(0);
        else
            revBinary(num);
    }

}
```