```java
public class Day3 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Q1(5);

        Q2();

        Q3();

        Q4(4);
    }

    public static int Q1(int num) {
        if(num==0) {
            return 1;
        }
        if(num == 1) {
            return 1;
        }

        return num * Q1(num-1);
    }

    public static void Q2() {
        int n = 2;
        for(int i = 1 ; i<=3 ; i++) {
            for(int j = 1 ; j<=i ; j++) {
                System.out.print(Fib(n++)+" ");
            }
            System.out.println();
```

```java
        }
}


public static int Fib(int num) {

        if(num == 0) {

                return 0;

        }
        if(num==1) {

                return 1;

        }
        return Fib(num-1) + Fib(num-2);

}


public static void Q3() {

        P1();

        System.out.println();

        P2();

}
public static void P1() {

        for(int i = 3 ; i >=1 ; i--) {

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

                        System.out.print(" ");

                }
                for(int j = 3 ; j >= i ; j--) {

                        System.out.print(j);

                }
                for(int a = 3 ; a > i ; a--) {

                        System.out.print(a);
```

```java
            }
            System.out.println();

        }


        for(int i = 2; i <=3  ; i++) {
            for(int k = 1 ; k < i ; k++) {
                System.out.print(" ");
            }
            for(int a = 3 ; a > i ; a--) {
                System.out.print(a);
            }
            for(int j = i ; j <= 3 ; j++) {
                System.out.print(j);
            }
            System.out.println();
        }
    }
    public static void P2() {
        for(int i = 3 ; i >= 1 ; i--) {
            for(int j = i ; j >= 1; j--) {
                System.out.print("*");
            }
            System.out.println();
        }
    }
    public static void Q4(int num) {
        while(num!=0) {
            System.out.print(num%2);
```

```
                num/=2;

        }

    }

}
```