2014年

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$11-15\quad BBCCD$

二

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三.1.

```
public class Computer {
    private String cpuType;
    private int hdCapacity;
    private int ramSize;
    private String GPUType;
    private float ScreenSize;

    public Computer(String cpuType, int hdCapacity, int ramSize, String gpuType,
float screenSize) {
        this.cpuType = cpuType;
        this.hdCapacity = hdCapacity;
        this.ramSize = ramSize;
        GPUType = gpuType;
        ScreenSize = screenSize;
    }


    public String getCpuType() {
        return cpuType;
    }

    public void setCpuType(String cpuType) {
        this.cpuType = cpuType;
    }

    public int getHdCapacity() {
        return hdCapacity;
    }
    public void setHdCapacity(int hdCapacity) {
        this.hdCapacity = hdCapacity;
    }

    public int getRamSize() {
        return ramSize;
    }

    public void setRamSize(int ramSize) {
        this.ramSize = ramSize;
    }


    public String getGPUType() {
        return GPUType;
    }

    public void setGPUType(String GPUType) {
        this.GPUType = GPUType;
    }

    public float getScreenSize() {
        return ScreenSize;
    }

    public void setScreenSize(float screenSize) {
        ScreenSize = screenSize;
    }
}

class Main{
    public static void main(String[] args) {
        Computer pc = new Computer("i3-2350", 1, 4, "GTX-760", 21.5f);
        pc.setCpuType("i5-4460");
        pc.setHdCapacity(2);
        pc.setRamSize(8);
        pc.setGPUType("GTX-780");
        pc.setScreenSize(27);
        System.out.println("Computer information:");
        System.out.println("CPU type: "+pc.getCpuType());
        System.out.println("Hd size: "+pc.getHdCapacity()+"T");
        System.out.println("RAM size: "+pc.getRamSize()+"G");
        System.out.println("GPU type: "+pc.getGPUType());
        System.out.println("Screen size: "+pc.getScreenSize()+"inches");
    }
}
```

三.2.

```
public class Image {
    public int width;
    public int height;

    public static void main(String[] args){
        BinaryImage b = new BinaryImage(20, 20);
        GreyImage g = new GreyImage(20, 20);
        ColorImage c = new ColorImage(20, 20);
        System.out.println("The Binary Image needs "+b.calSize()+" bits");
        System.out.println("The Grey Image needs "+g.calSize()+" bits");
        System.out.println("The Color Image needs "+c.calSize()+" bits");
    }
}

public interface I {

    public int calSize();

}

public class BinaryImage extends Image implements I {

    public int calSize() {
        int val = 1*width*height;
        return val;
    }
    public BinaryImage(int x,int y){
        width = x;
        height = y;
    }
}

public class GreyImage extends Image implements I{

    public int calSize() {
        int val = 8*width*height;
        return val;
    }
    public GreyImage(int x,int y){
        width = x;
        height = y;
    }
}

public class ColorImage extends Image implements I{

    public int calSize() {
        int val = 24*width*height;
        return val;
    }
    public ColorImage(int x,int y){
        width = x;
        height = y;
    }
}
```

三.3.

```
public class Number {
    public int value;
    public boolean isEven;
    public Number(int v)
    {
        value = v;
        if(value % 2 == 0) isEven = true;
    }
    public int getValue()
    {
        return value;
    }
    public boolean getIsEven()
    {
        return isEven;
    }
}

public class Triangle {
    public int LENGTH = 9;
    public Number[][] f;
    public Triangle(int x)
    {
        LENGTH = x;
        f = new Number[LENGTH][LENGTH];
    }
    public void fib()
    {

        f[0][0] = new Number(1);
        for(int i=1; i<LENGTH; i++)
        {
            f[i][0] = new Number(1);
            f[i][1] = new Number(1);
        }
        for(int i=2; i<LENGTH; i++){
            for(int j=2; j<=i; j++){
                int v = f[i][j-1].getValue() + f[i][j-2].getValue();
                f[i][j] = new Number(v);
            }
        }

    }
    public void print()
    {
        for(int i=LENGTH-1; i>=0; i--){
            for(int j=0; j<=i; j++){
                System.out.print(f[i][j].getValue() + " ");
            }
            System.out.println();
        }
    }

    public static void main(String[] args)
    {
        int depth = Integer.parseInt(args[0]);
        Triangle t = new Triangle(depth);
        t.fib();
        t.print();
    }
}
```