

```
package gobalkrishnan_v_18_06_1995.color;

public class gkiRGB_to_CMYK {
    private double c_255_to_1(int i){
        return i/255d;
    }
    private int c_1_to_255(double i){
        return (int) Math.round(i*255);
    }

    private double max(double a,double b,double c){
        if((a>b)&&(a>c)){
            return a;
        }else if(b>c){
            return b;
        }else{
            return c;
        }
    }

    public double black,cyan,magneta,yellow;
    public int red,green,blue;
    double r,g,b;

    public void setRed(int r){
        this.red=r;
        process();
    }
    public void setGreen(int r){
        this.green=r;
        process();
    }
    public void setBlue(int r){
        this.blue=r;
        process();
    }

    public void setRGB(int r,int g,int b){
        setRed(r);
        setGreen(g);
        setBlue(b);
    }

    private void process(){
        r=c_255_to_1(red);
        g=c_255_to_1(green);
    }
}
```

gkiRGB_to_CMYK.java

```
b=c_255_to_1(blue);
black=1-max(r,g,b);
cyan  =(1-r-black)/(double)(1-black);
magneta =(1-g-black)/(double)(1-black);
yellow =(1-b-black)/(double)(1-black);
}

@Override
public String toString() {
    return "gkiRGB_to_CMYK [black=" + black + ", cyan=" + cyan
        + ", magneta=" + magneta + ", yello=" + yellow + "];"
}

}
```