

INTRODUCTION TO JAVA

ACTIVITY 3 – FUNCTIONS

1. **PlayThatTuneDeluxe => StairwayToHeaven (1/8, 1/4, 1/2, 1, 2)**

- a. Done. Modified function `note(int pitch, double t)` to add new harmonics

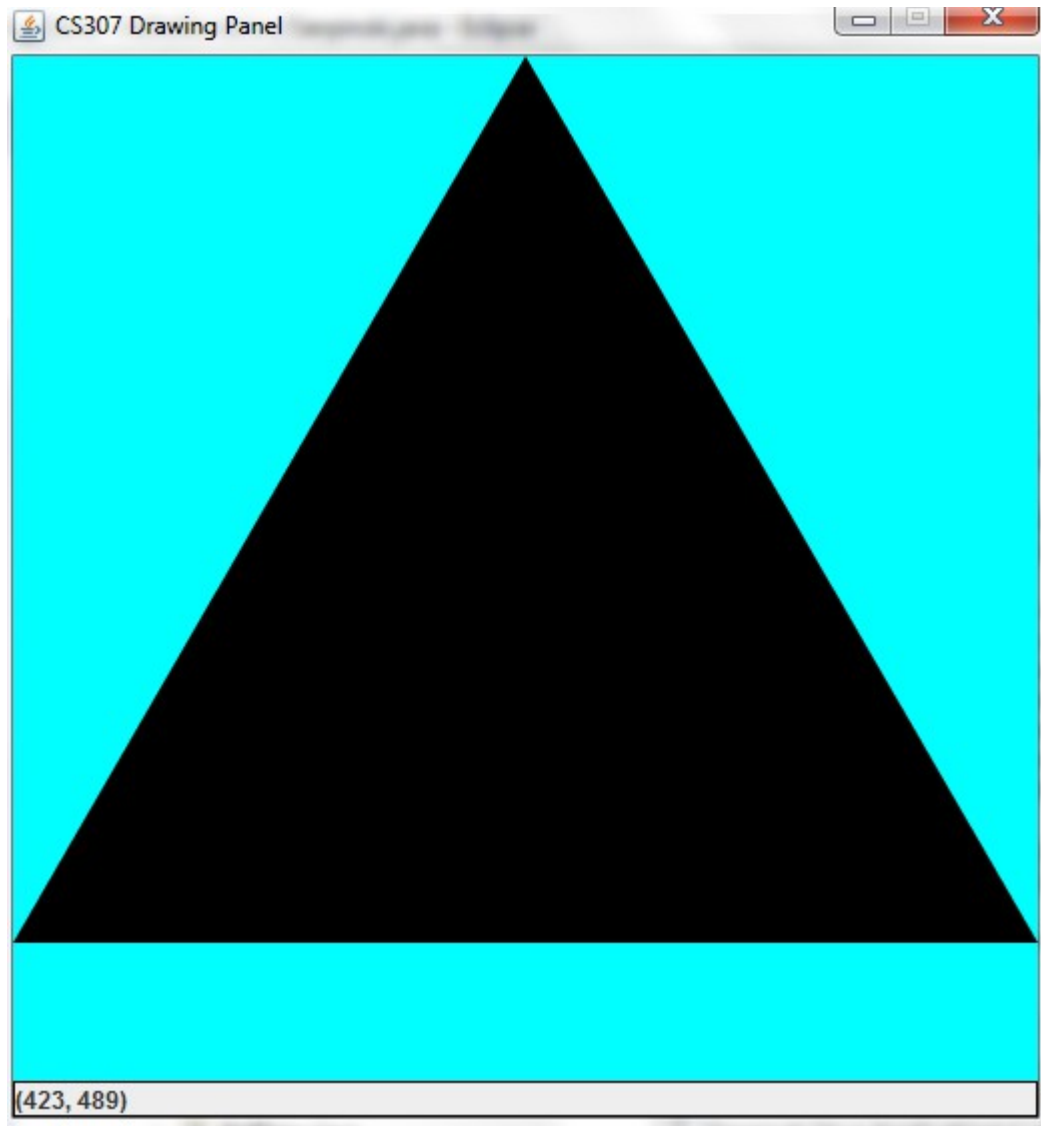
2. **Calendar**

OUTPUT

```
February 2016
S M Tu W Th F S
    1 2 3 4 5 6
7  8 9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29
```

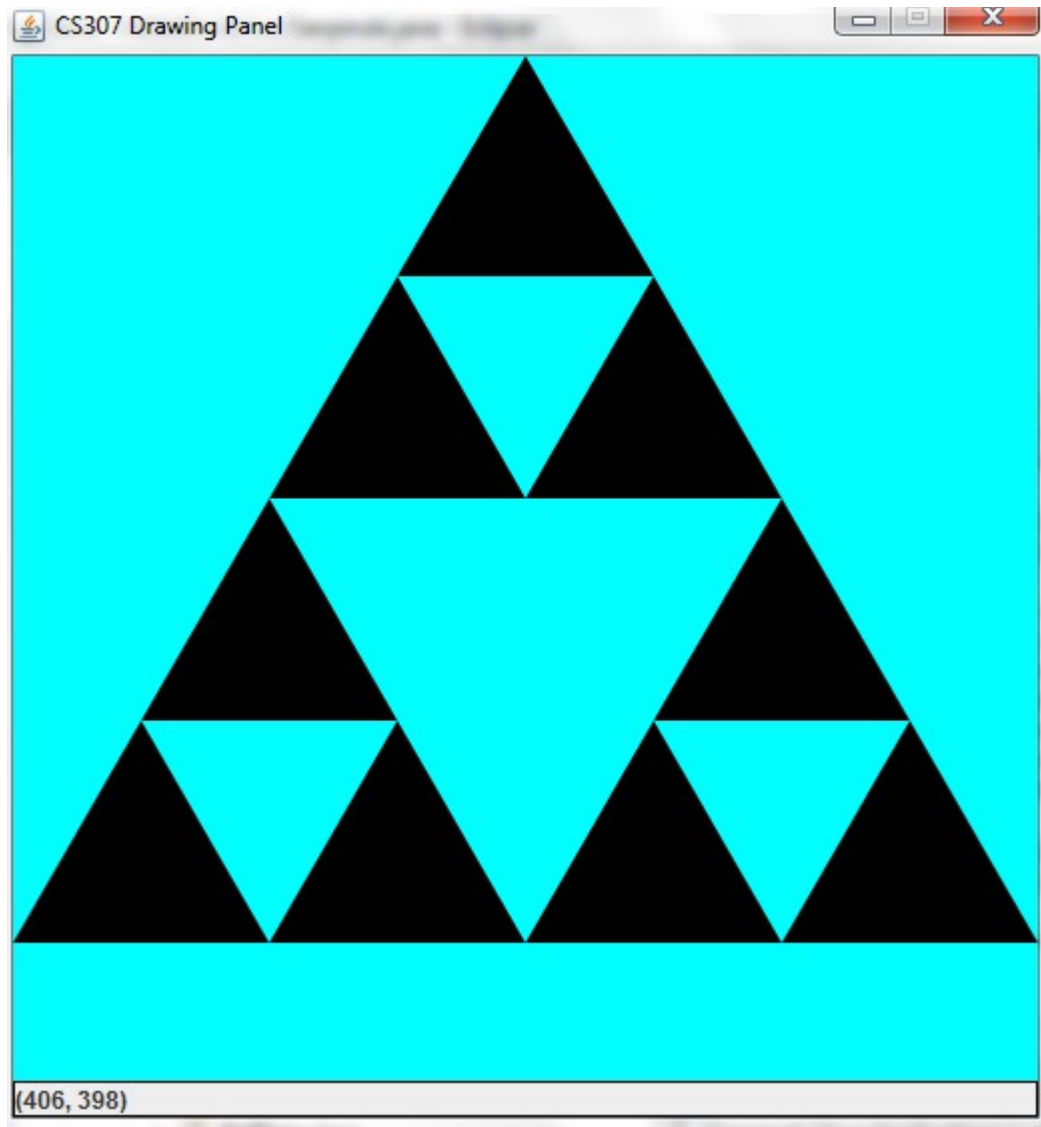
3. Sierpinski (Calculate black triangle area)

OUTPUT (Level 1)



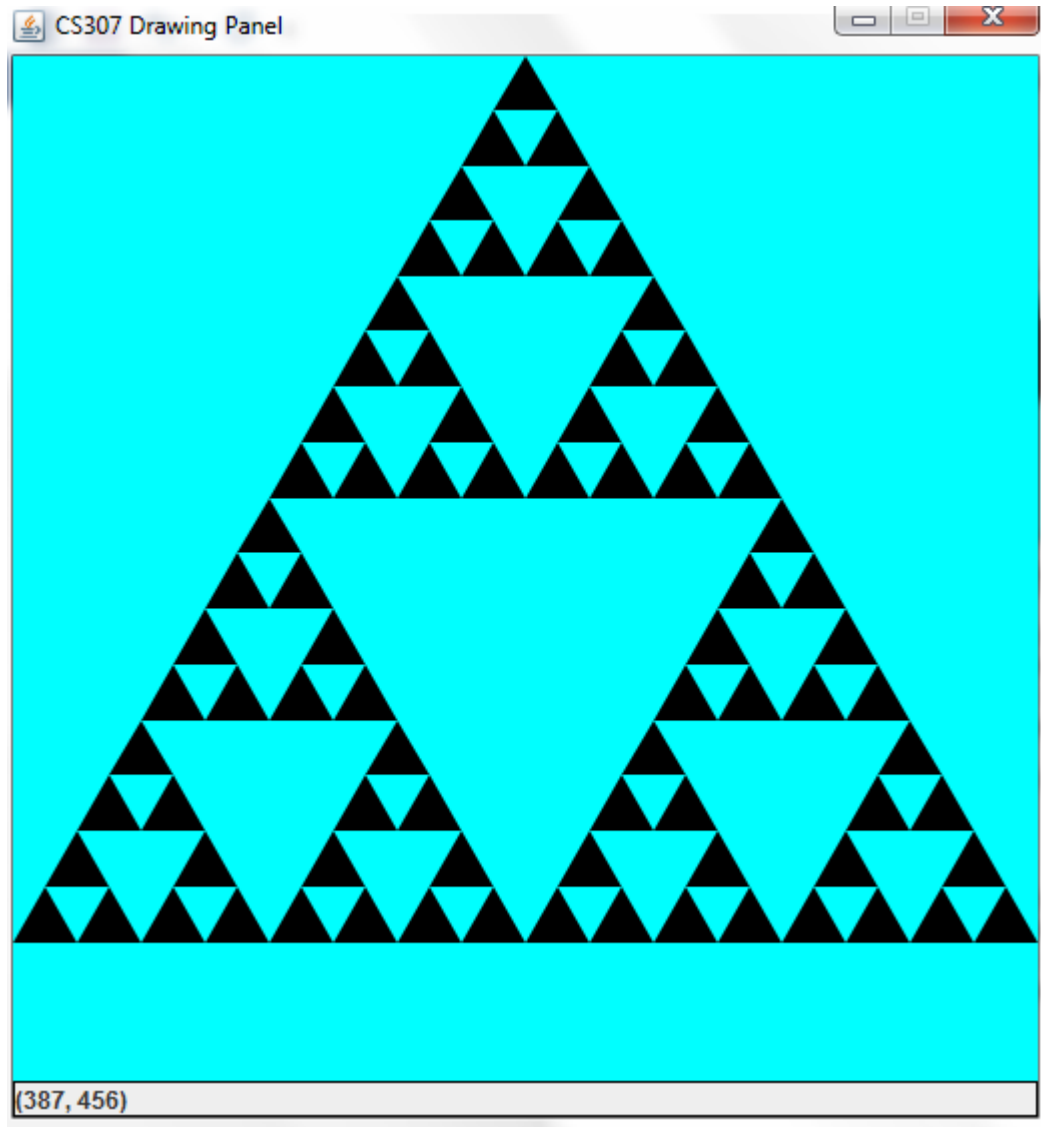
```
What level do you want? 1
No. of black inverted triangles: 1
No. of upright white triangles: 0
Total Black Area = 113408.0
```

OUTPUT (Level 3)



What level do you want? 3
No. of black inverted triangles: 9
No. of upright white triangles: 4
Total Black Area = 63936.0

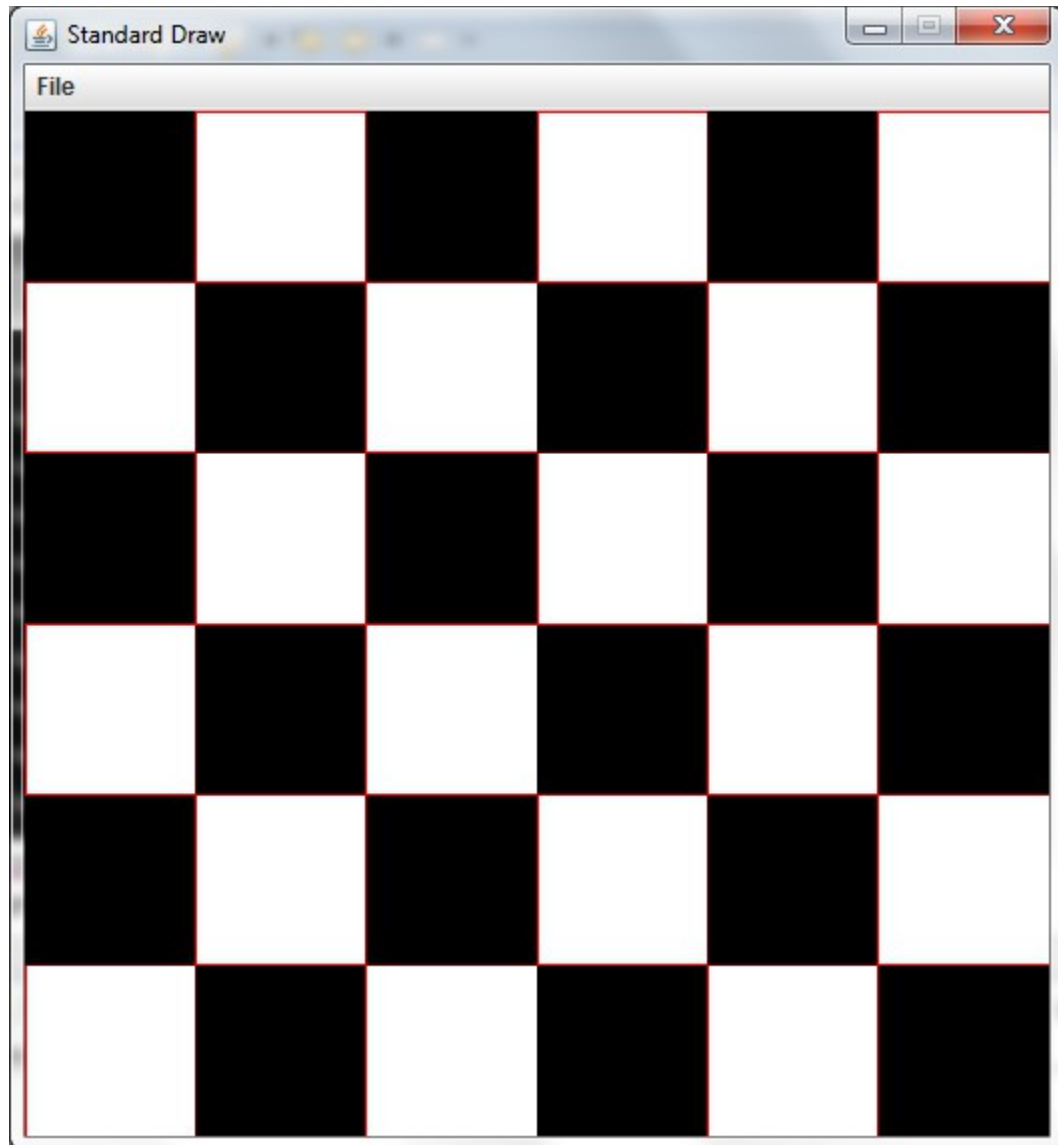
OUTPUT (Level 5)



What level do you want? 5
No. of black inverted triangles: 81
No. of upright white triangles: 40
Total Black Area = 36288.0

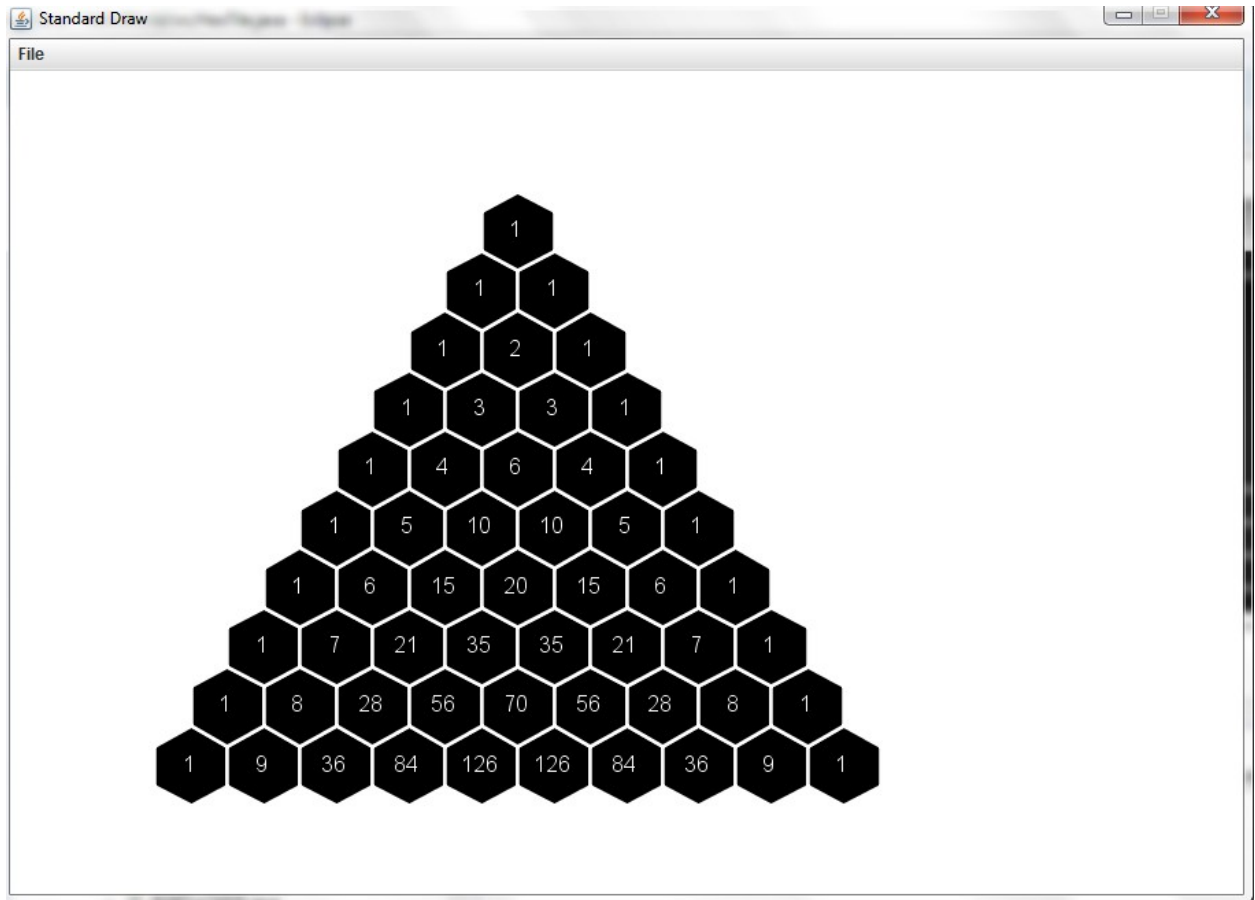
4. **Diamond Tile (Modified to draw a Chess Board**

OUTPUT (N = 6)



5. HexTile + Pascal Triangle

OUTPUT:

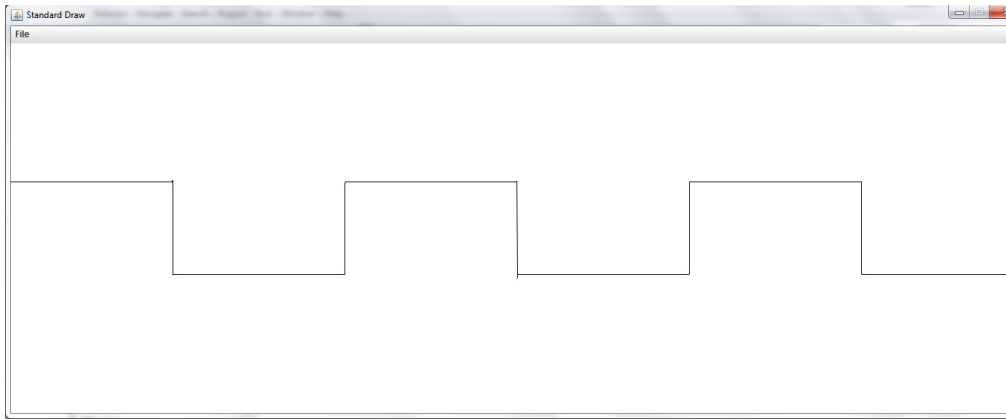


6. IBM Digit Verification

Done => See result on code

7. SawTooth

OTUPUT:



8. IFS.java

OUTPUT

