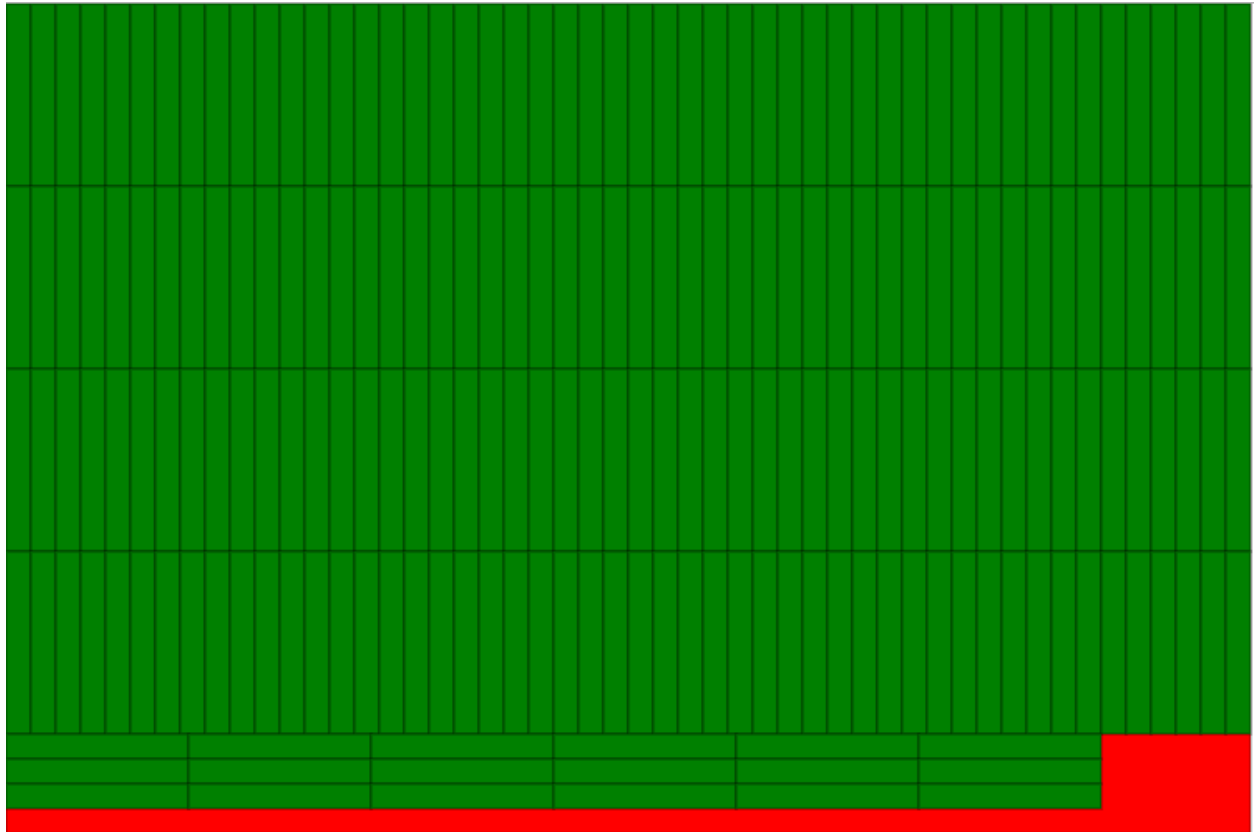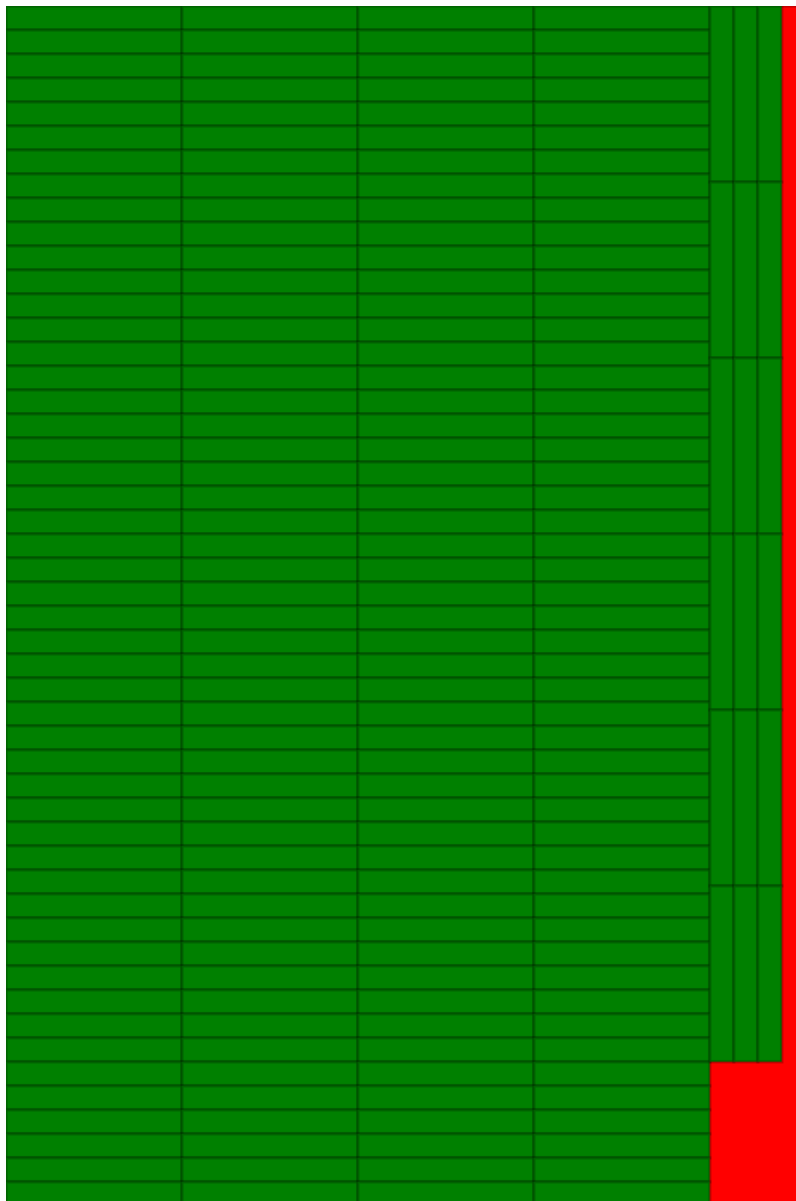```
user@PITHBLOOD:/mnt/c/users/muham/desktop/cpp/homework1$ ./1
Please enter the main container shape (R, C, T)
R
Please enter the width
750
Please enter the height
500
Please enter the small shape (R, C, T)
R
Please enter the width
110
Please enter the height
15
I can fit at most 218 small shapes into the main container. The empty area (red) in container is 15300
```
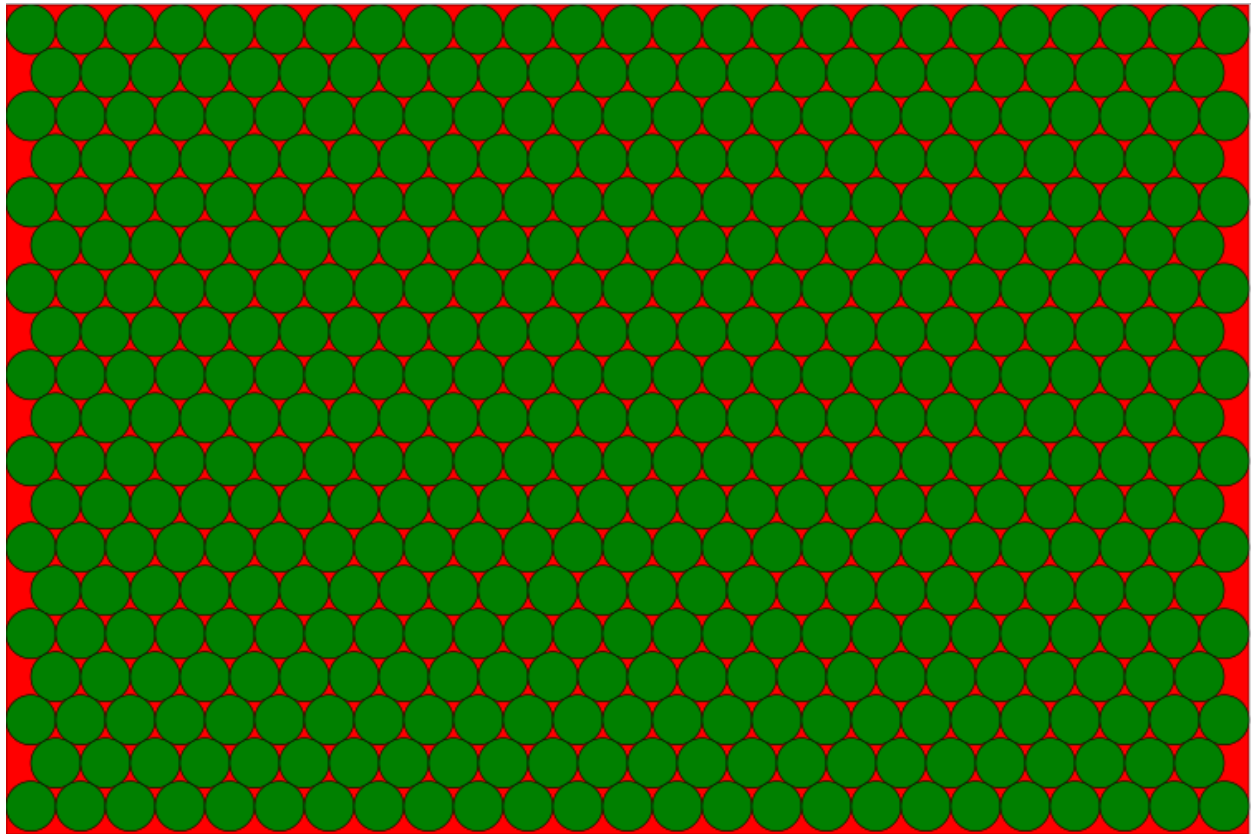


[Output1.svg](Output1.svg)

```
user@PITHBLOOD:/mnt/c/users/muham/desktop/cpp/homework1$ ./1
Please enter the main container shape (R, C, T)
r
Please enter the width
500
Please enter the height
750
Please enter the small shape (R, C, T)
r
Please enter the width
110
Please enter the height
15
I can fit at most 218 small shapes into the main container. The empty area (red) in container is 15300
```


Output2.svg

```
user@PITHBLOOD:/mnt/c/users/muham/desktop/cpp/homework1$ ./1
Please enter the main container shape (R, C, T)
R
Please enter the width
750
Please enter the height
500
Please enter the small shape (R, C, T)
C
Please enter the radius
15
I can fit at most 466 small shapes into the main container. The empty area (red) in container is 45604
```
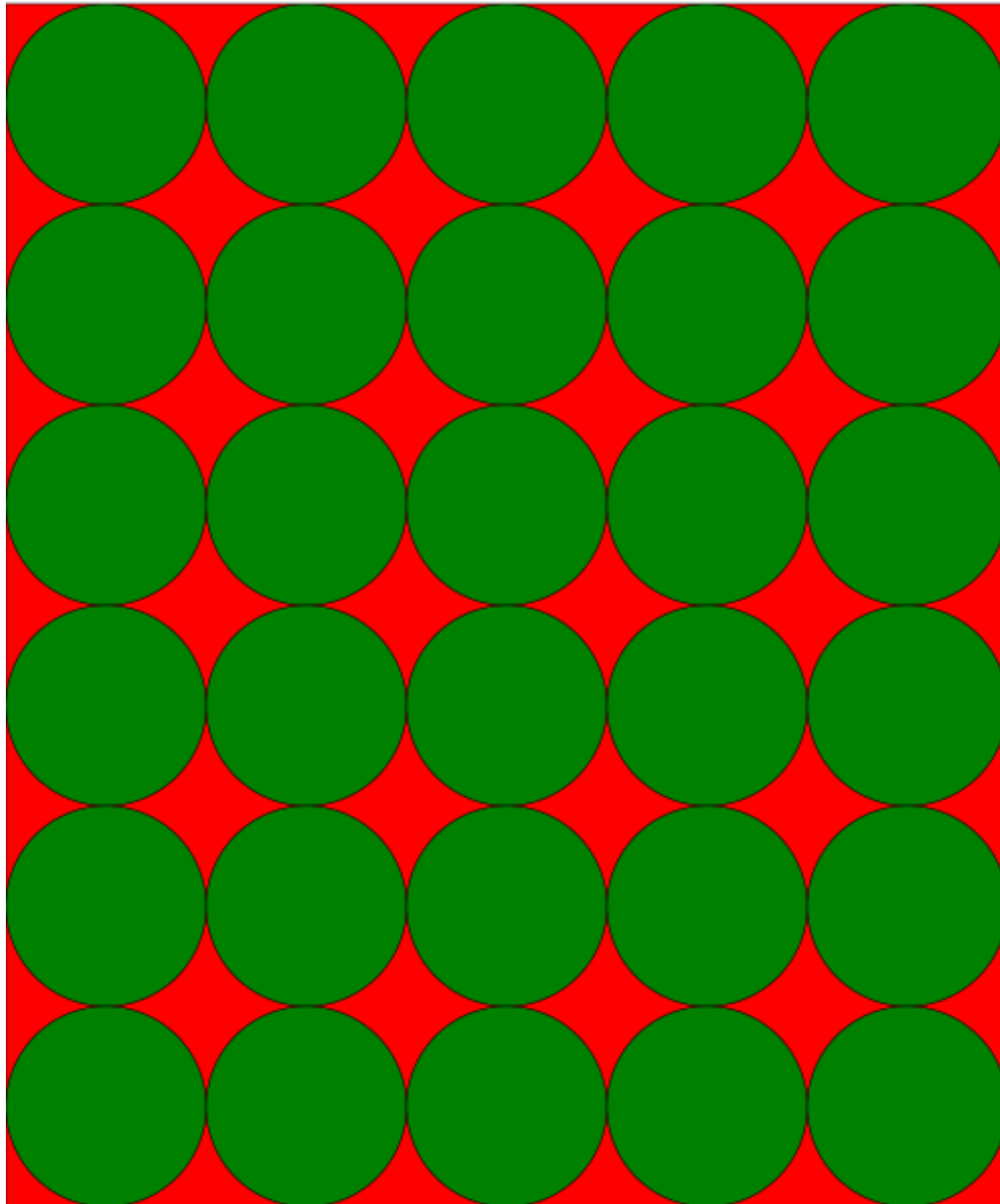
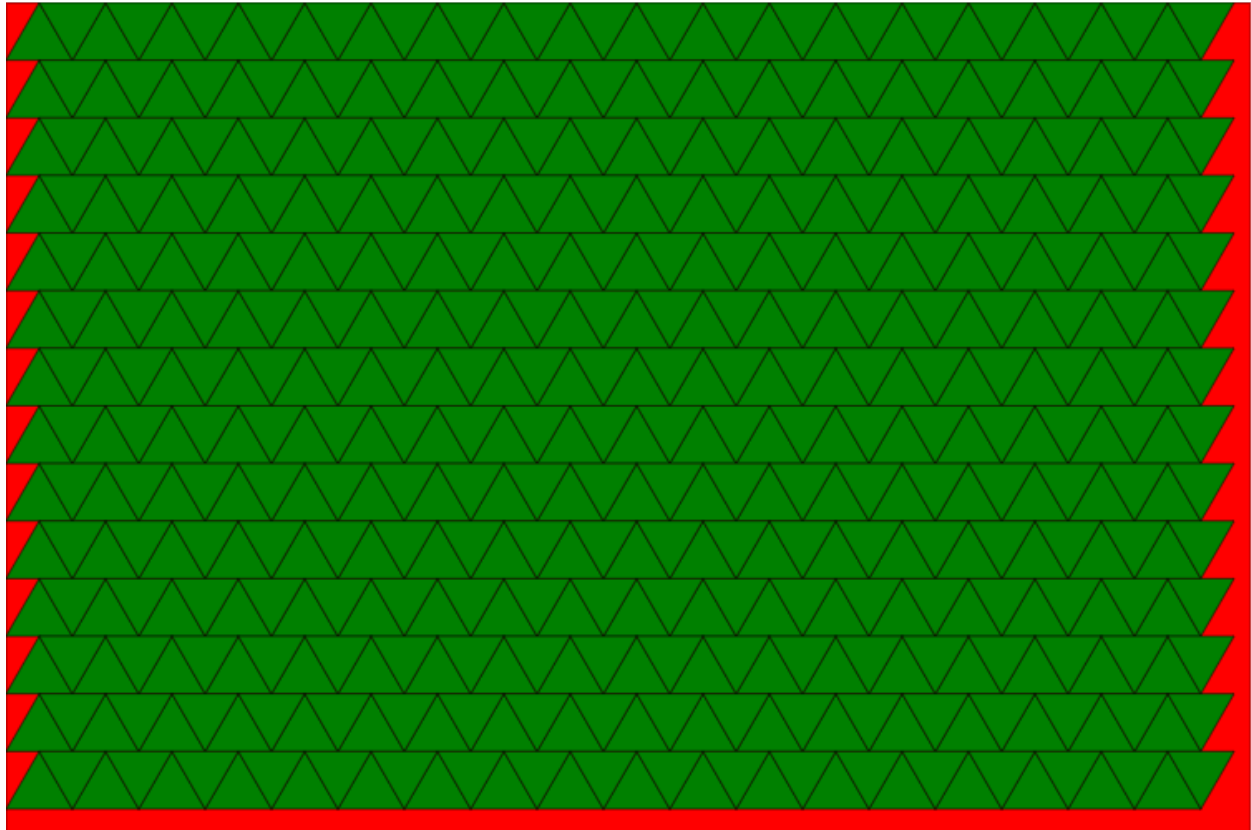**Triangle Pattern**

Output3.svg

```
Please enter the main container shape (R, C, T)
R
Please enter the width
500
Please enter the height
600
Please enter the small shape (R, C, T)
C
Please enter the radius
50
I can fit at most 30 small shapes into the main container. The empty area (red) in container is 64380.6
```
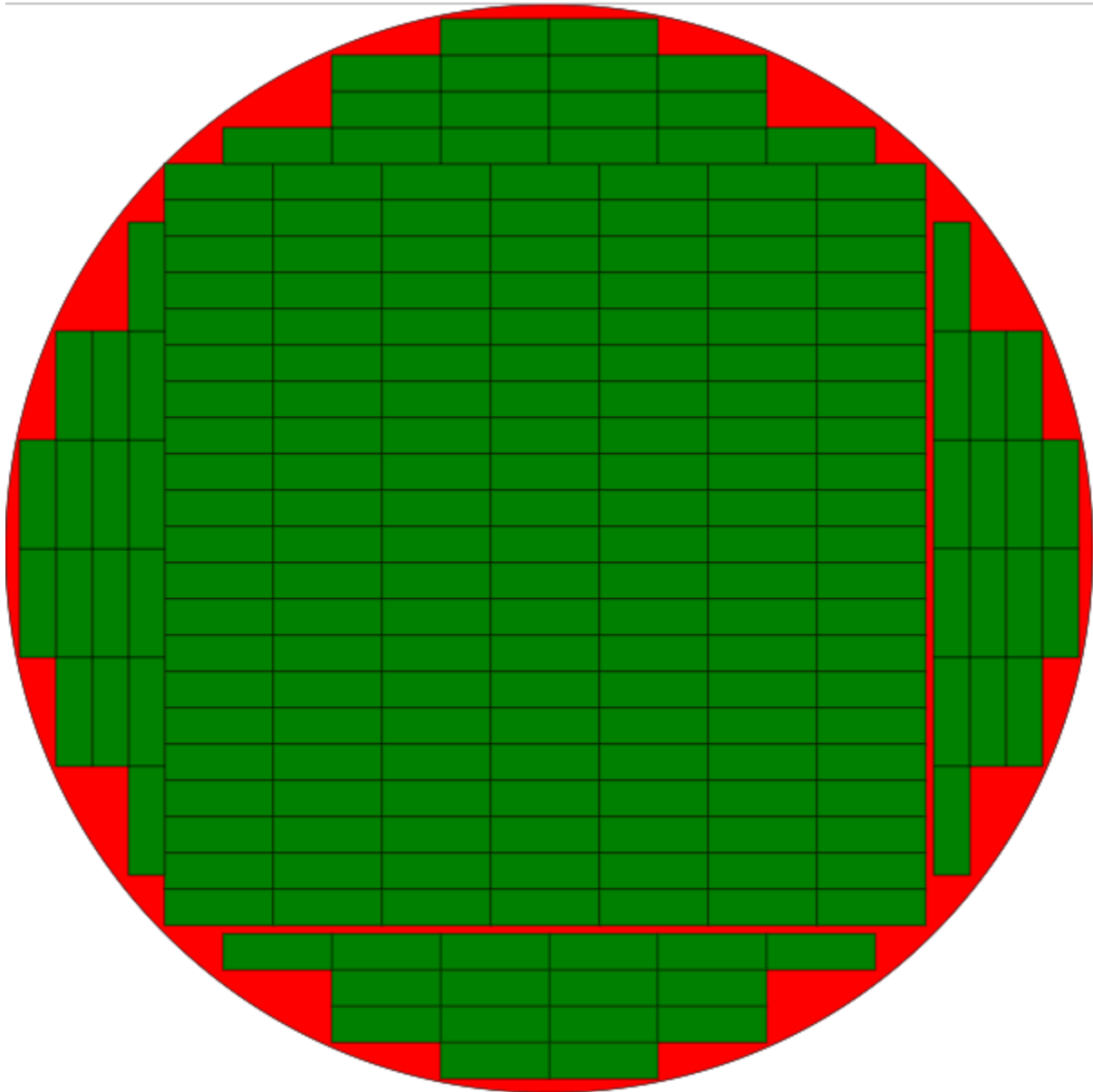
Rectangle Pattern

Output4.svg

```
user@PITHBLOOD:/mnt/c/users/muham/desktop/cpp/homework1$ ./1
Please enter the main container shape (R, C, T)
R
Please enter the width
750
Please enter the height
500
Please enter the small shape (R, C, T)
T
Please enter edge length
40
I can fit at most 504 small shapes into the main container. The empty area (red) in container is 25818.6
```
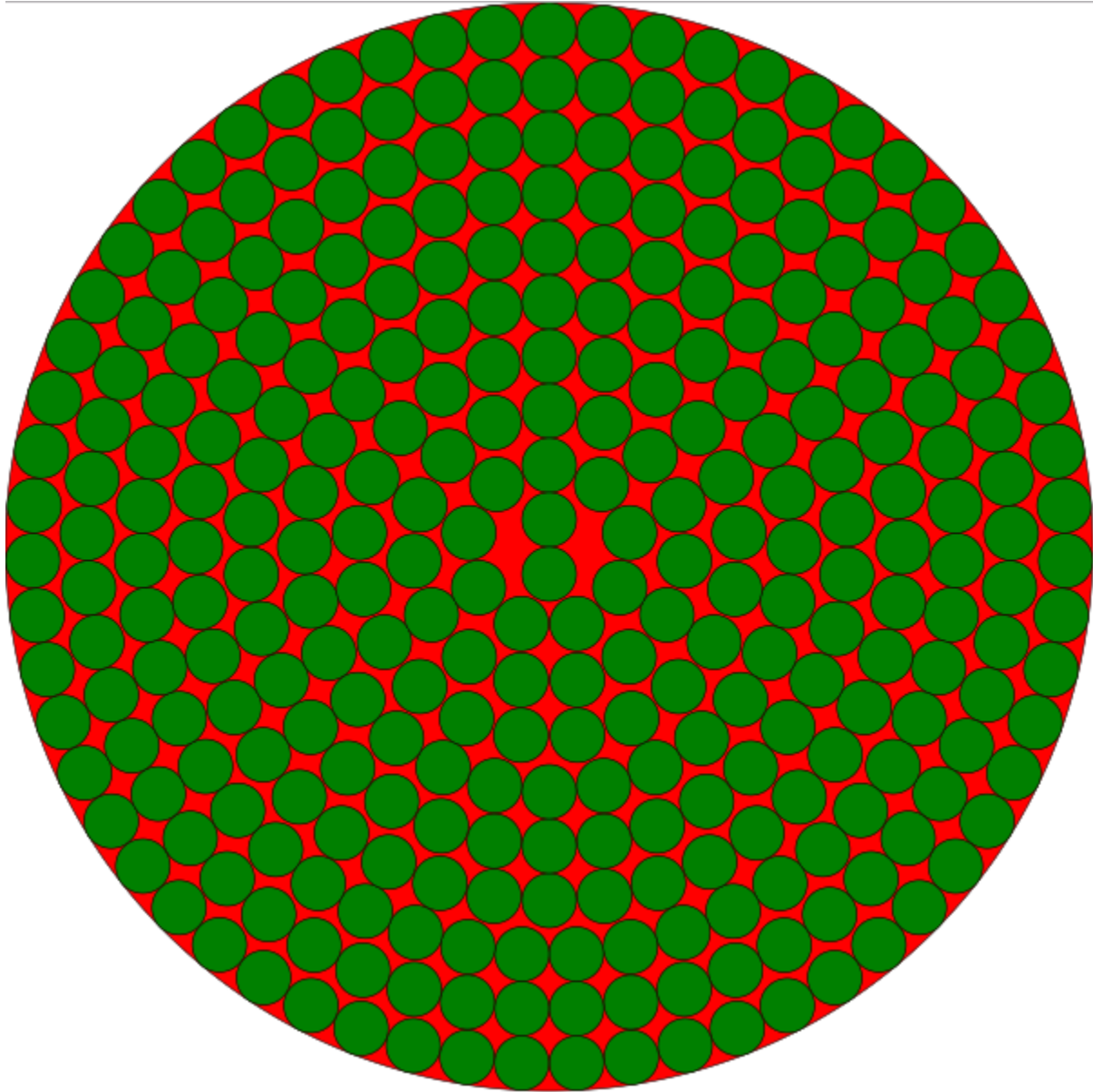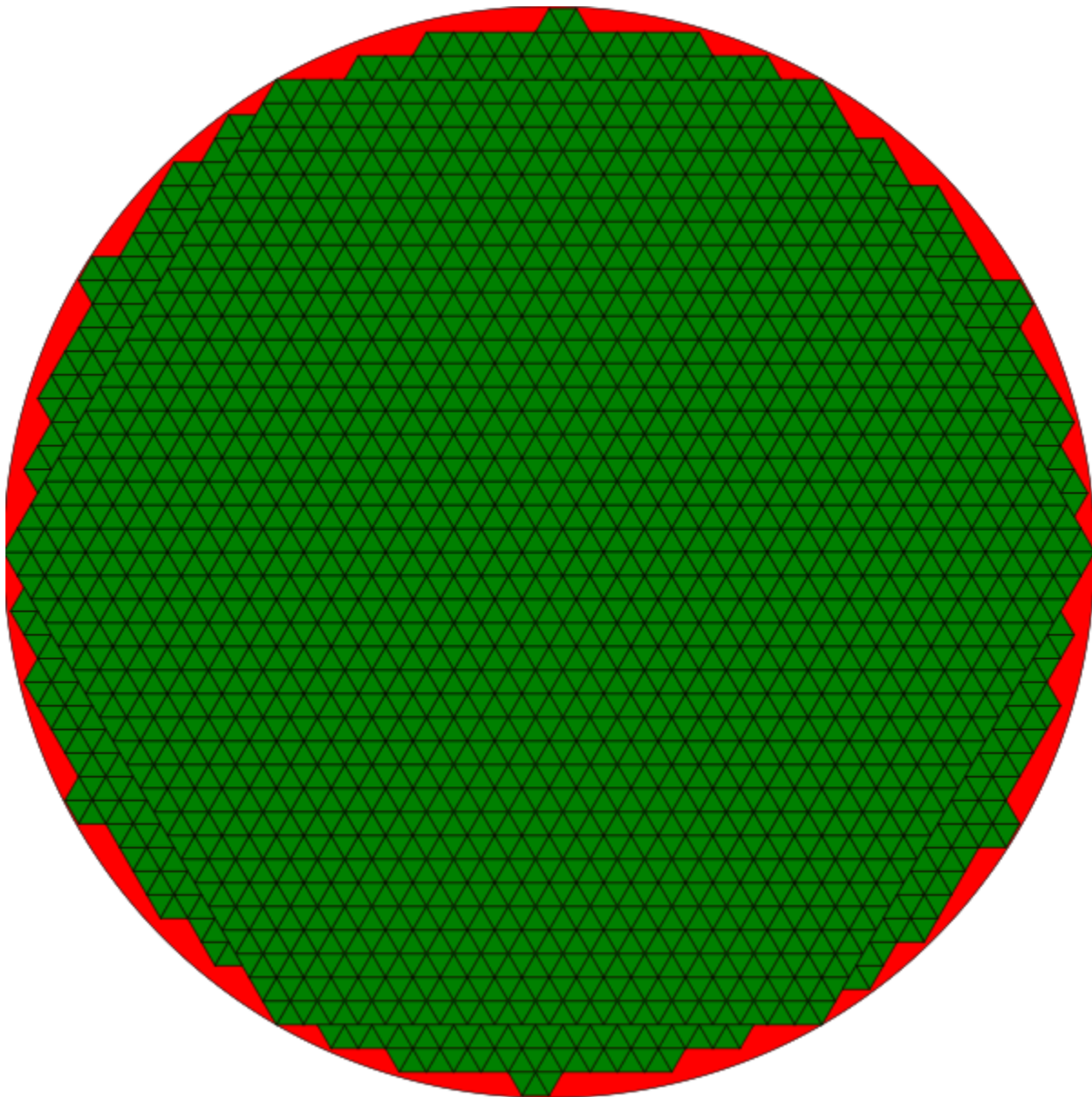

Output5.svg

Output6.svg

Output7.svg

```
user@PITHBLOOD:/mnt/c/users/muham/desktop/cpp/homework1$ ./1
Please enter the main container shape (R, C, T)
C
Please enter the radius
300
Please enter the small shape (R, C, T)
T
Please enter edge length
15
I can fit at most 2730 small shapes into the main container. The empty area (red) in container is 16765.3
```
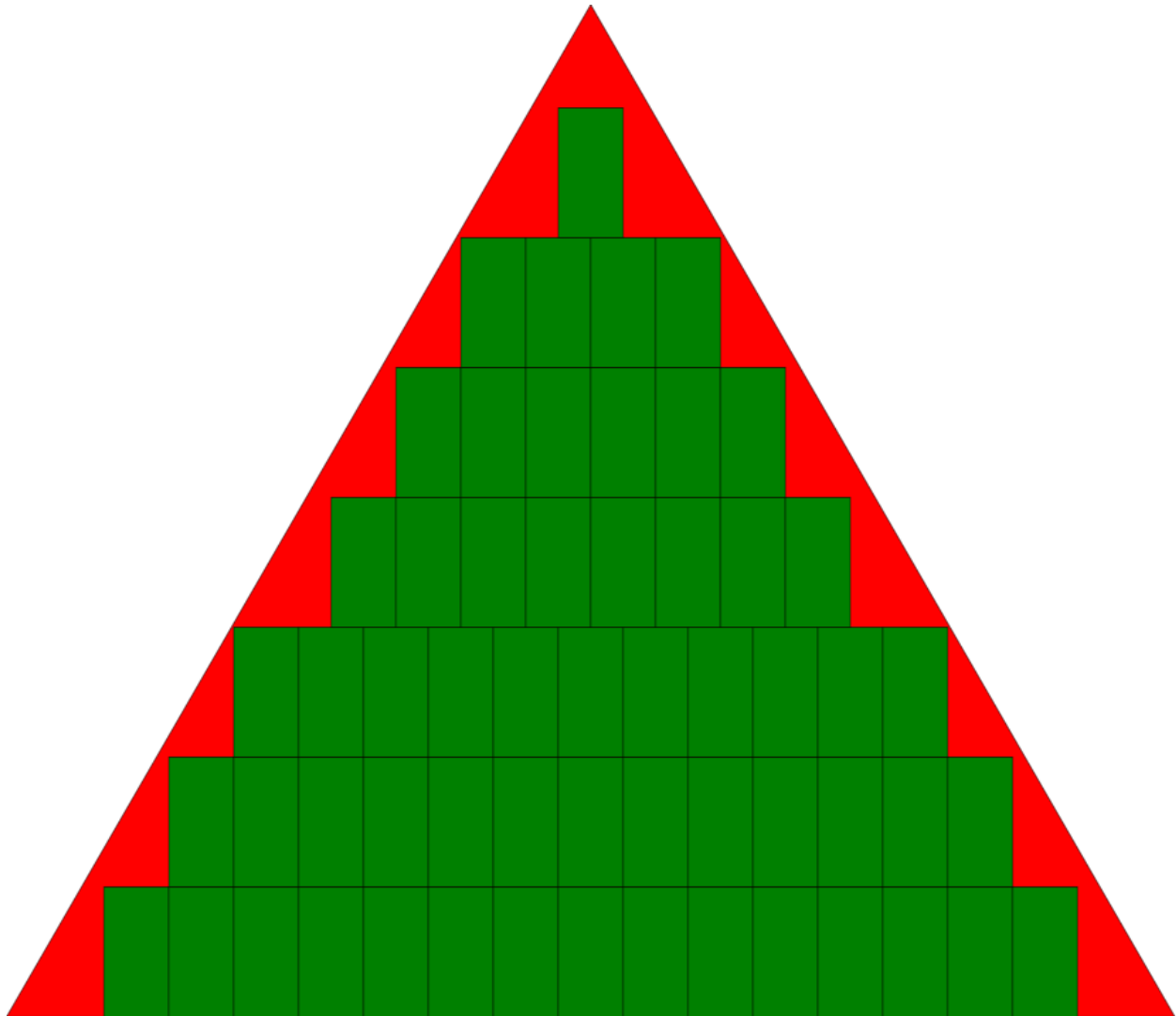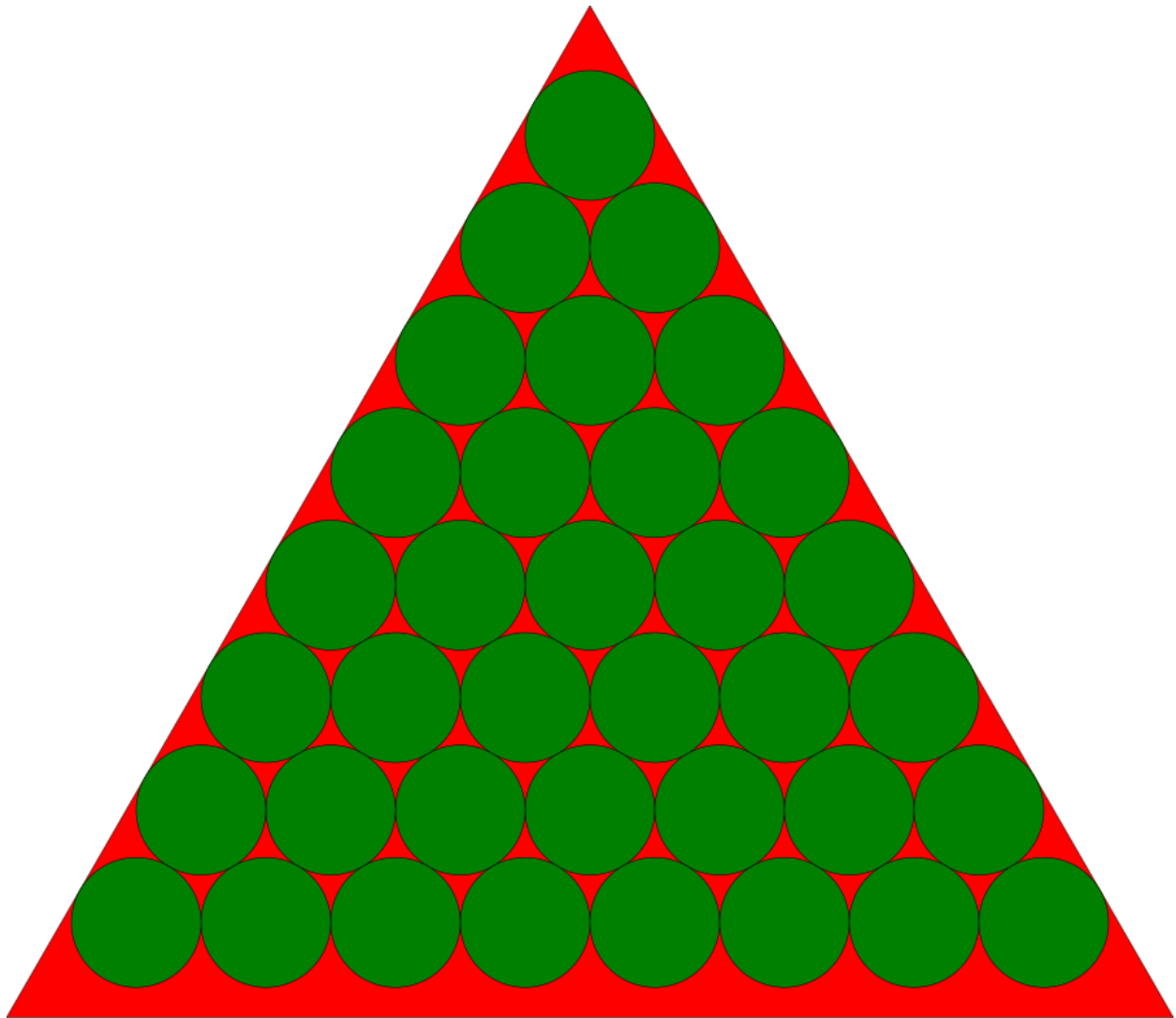

Output8.svg

user@PITHBLOOD:/mnt/c/users/muham/desktop/cpp/homework1$ ./1
Please enter the main container shape (R, C, T)
T
Please enter edge length
900
Please enter the small shape (R, C, T)
R
Please enter the width
50
Please enter the height
100
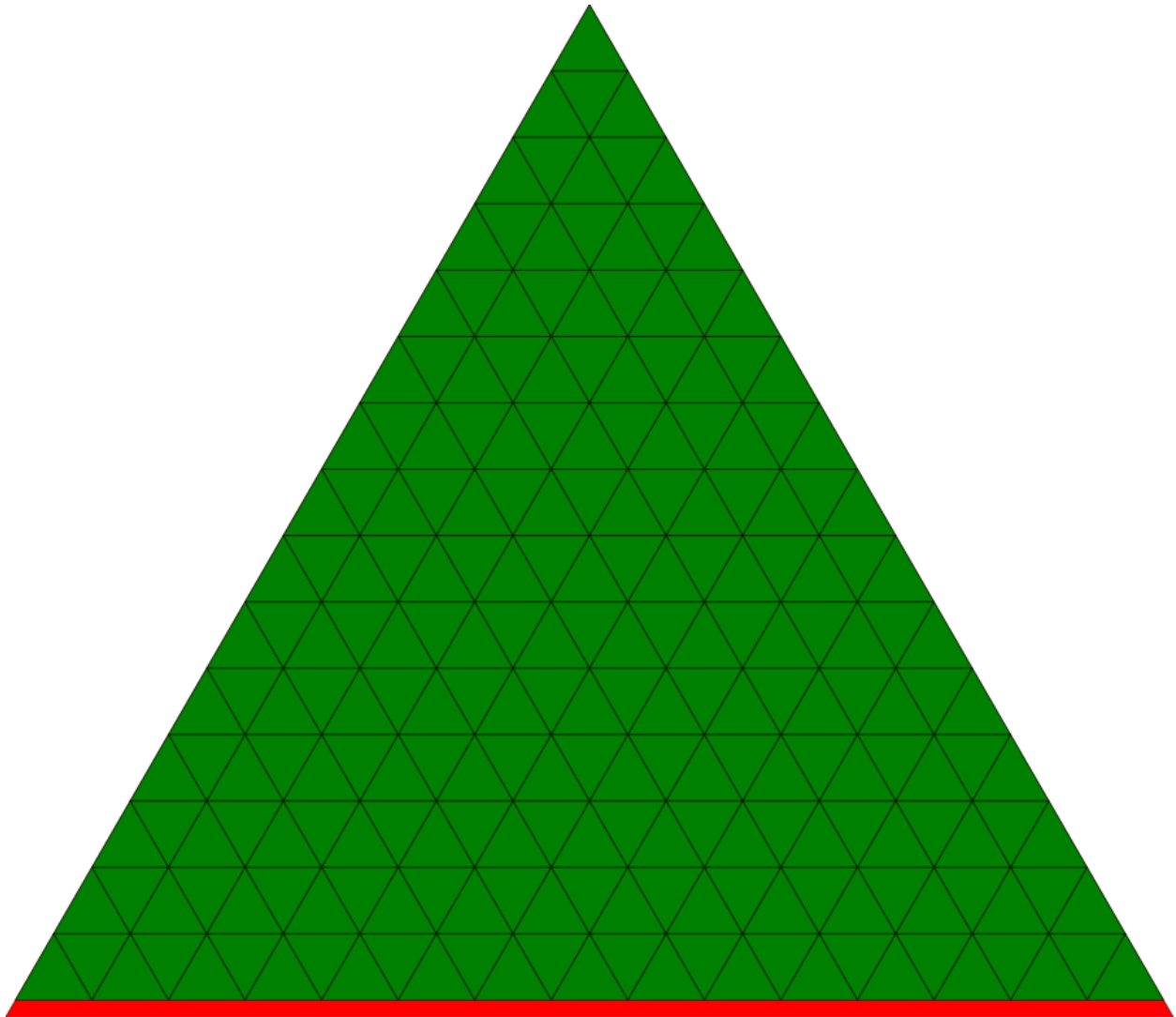I can fit at most 58 small shapes into the main container. The empty area (red) in container is 60740.3

Output9.svg

```
user@PITHBLOOD:/mnt/c/users/muham/desktop/cpp/homework1$ ./1
Please enter the main container shape (R, C, T)
T
Please enter edge length
900
Please enter the small shape (R, C, T)
C
Please enter the radius
50
I can fit at most 36 small shapes into the main container. The empty area (red) in container is 67996.9
```


Output10.svg

```
user@PITHBLOOD:/mnt/c/users/muham/desktop/cpp/homework1$ ./1
Please enter the main container shape (R, C, T)
T
Please enter edge length
900
Please enter the small shape (R, C, T)
T
Please enter edge length
59
I can fit at most 225 small shapes into the main container. The empty area (red) in container is 11593.9
```


Output11.svg