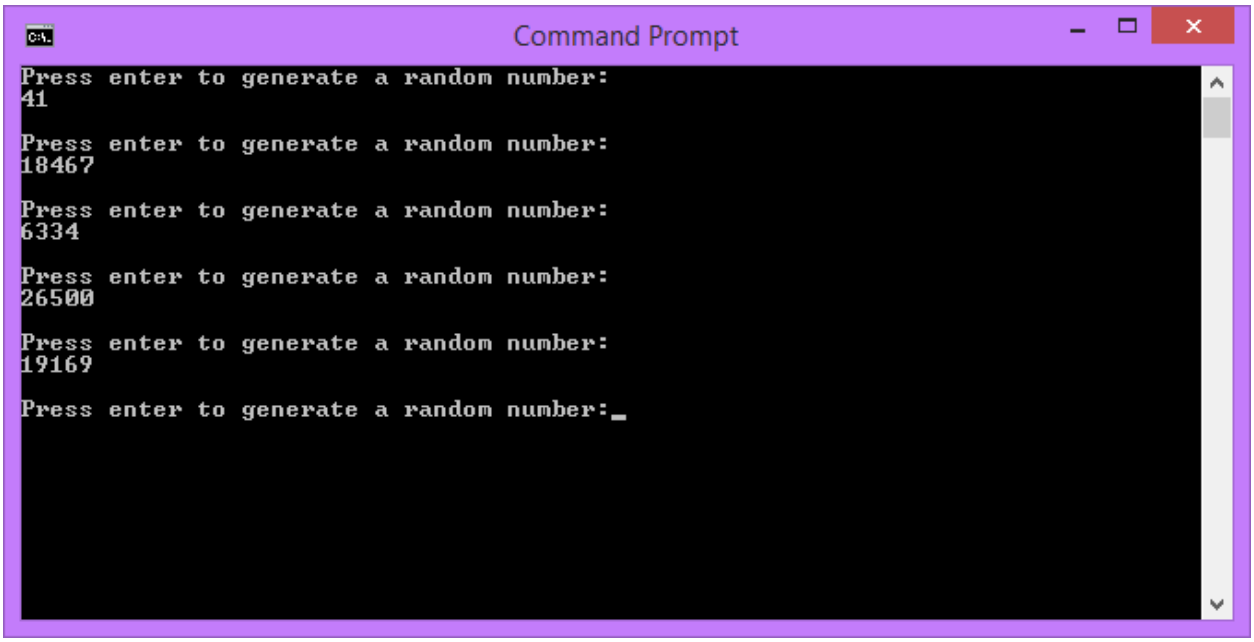
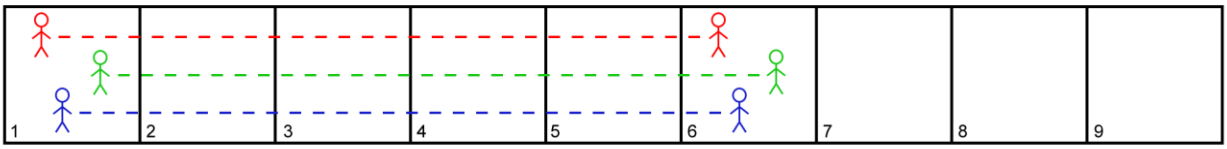
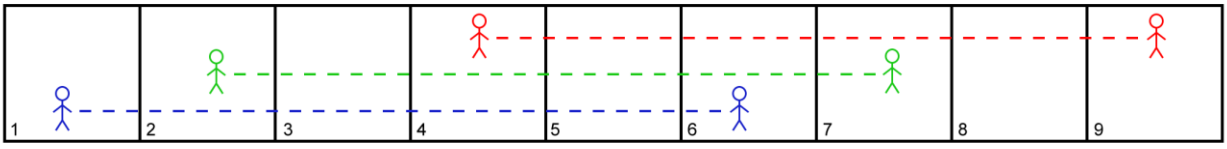
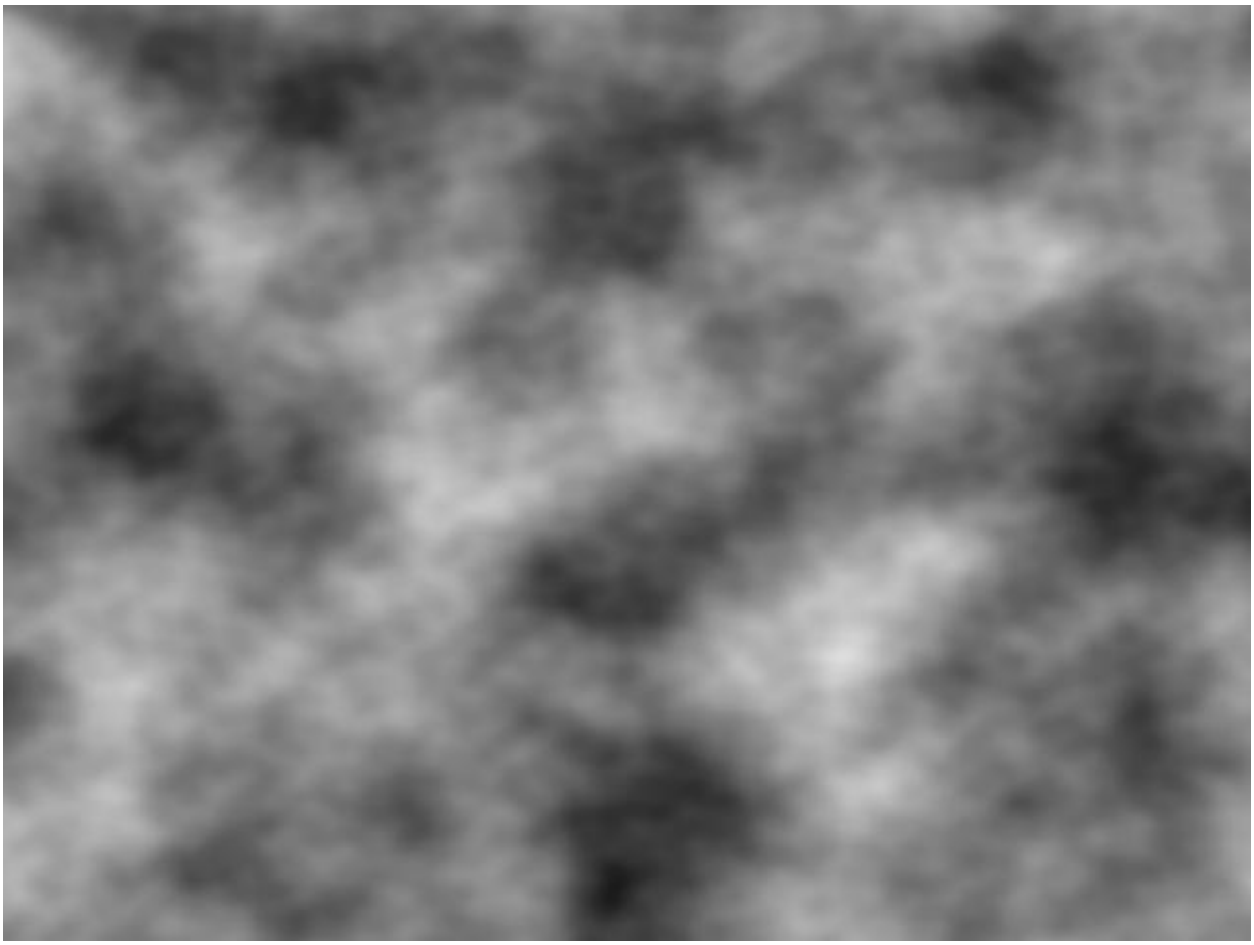
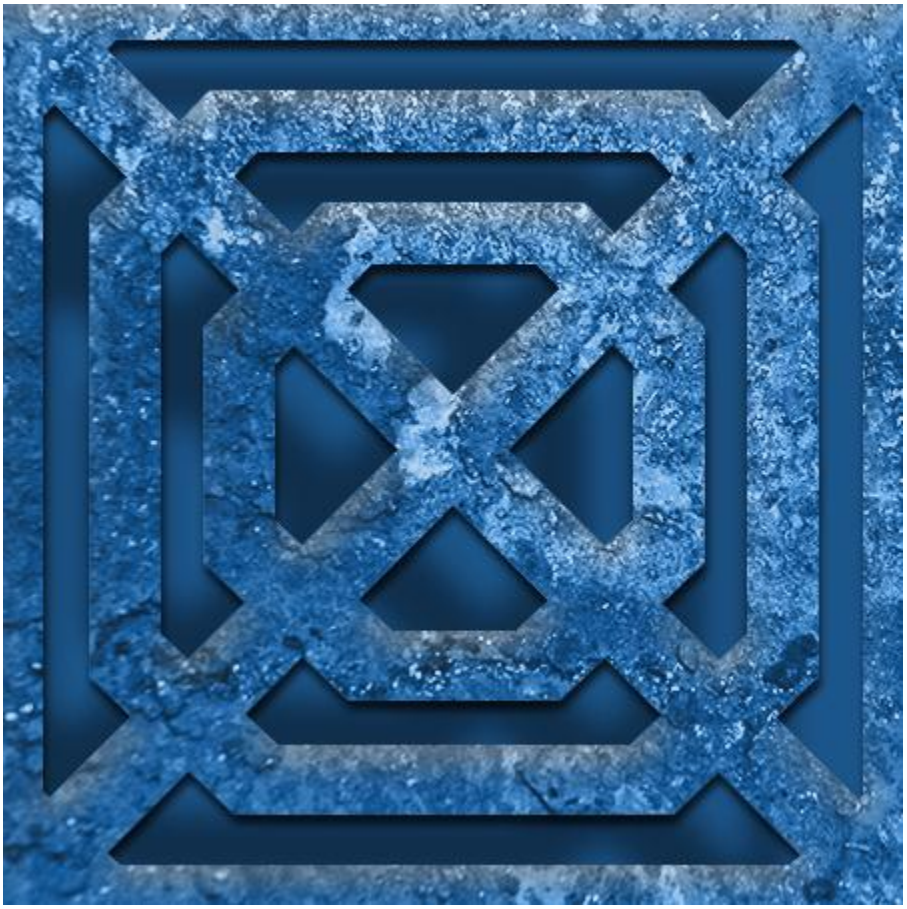
Chapter 1


Command Prompt
Press enter to generate a random number:
41
Press enter to generate a random number:
18467
Press enter to generate a random number:
6334
Press enter to generate a random number:
26500
Press enter to generate a random number:
19169
Press enter to generate a random number:

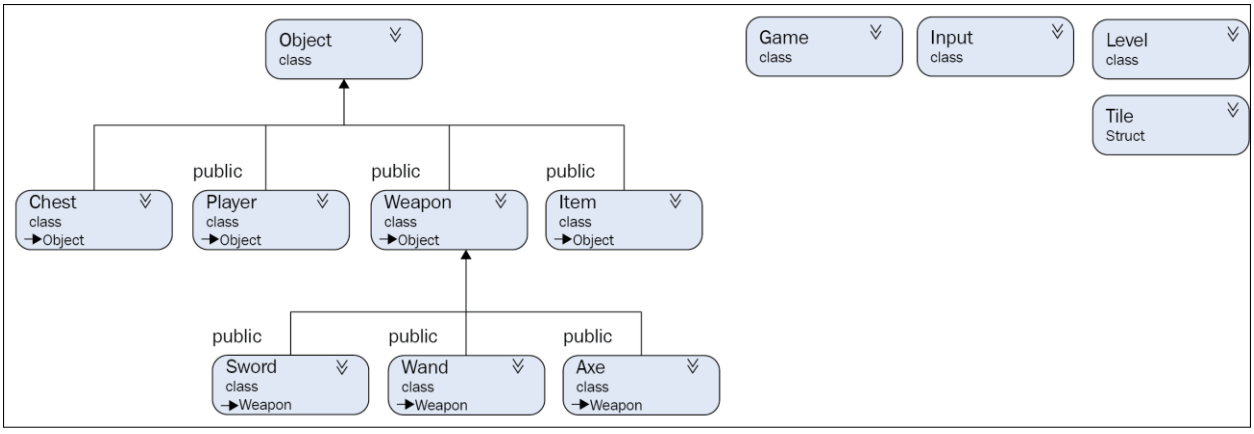

1
2
3
4
5
6
7
8
9


1
2
3
4
5
6
7
8
9



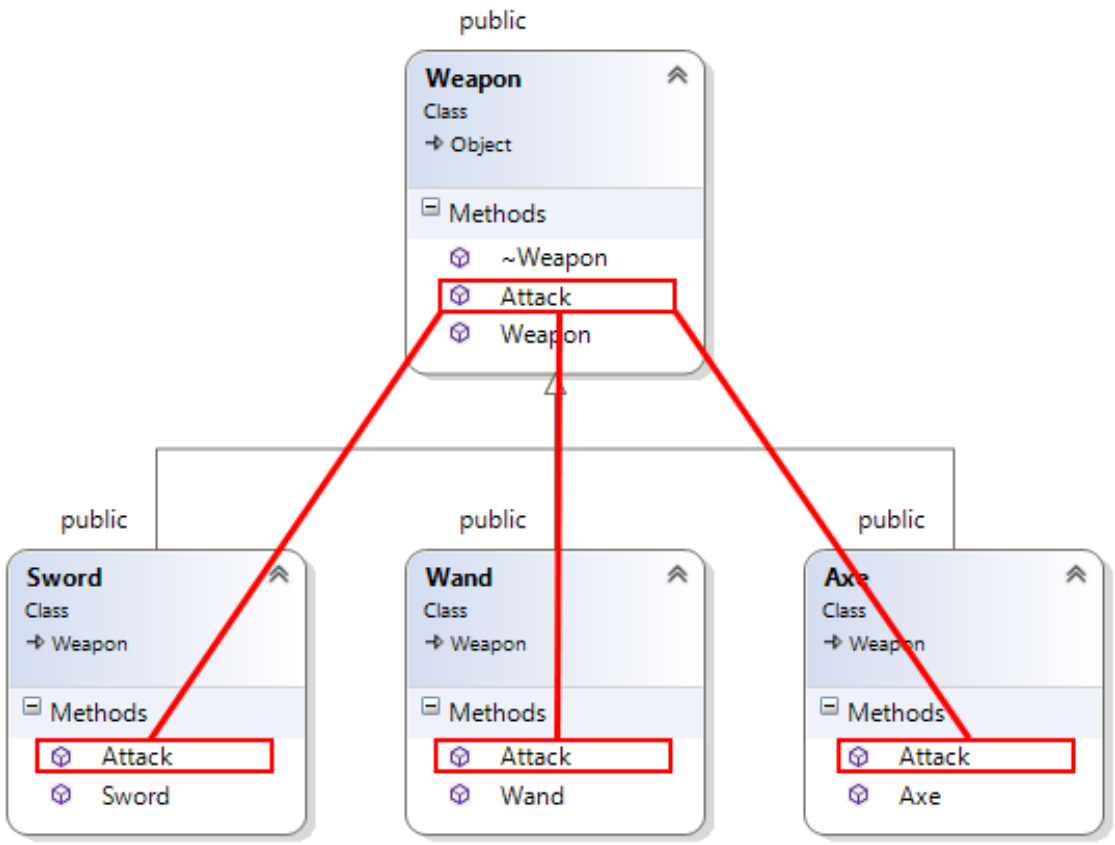


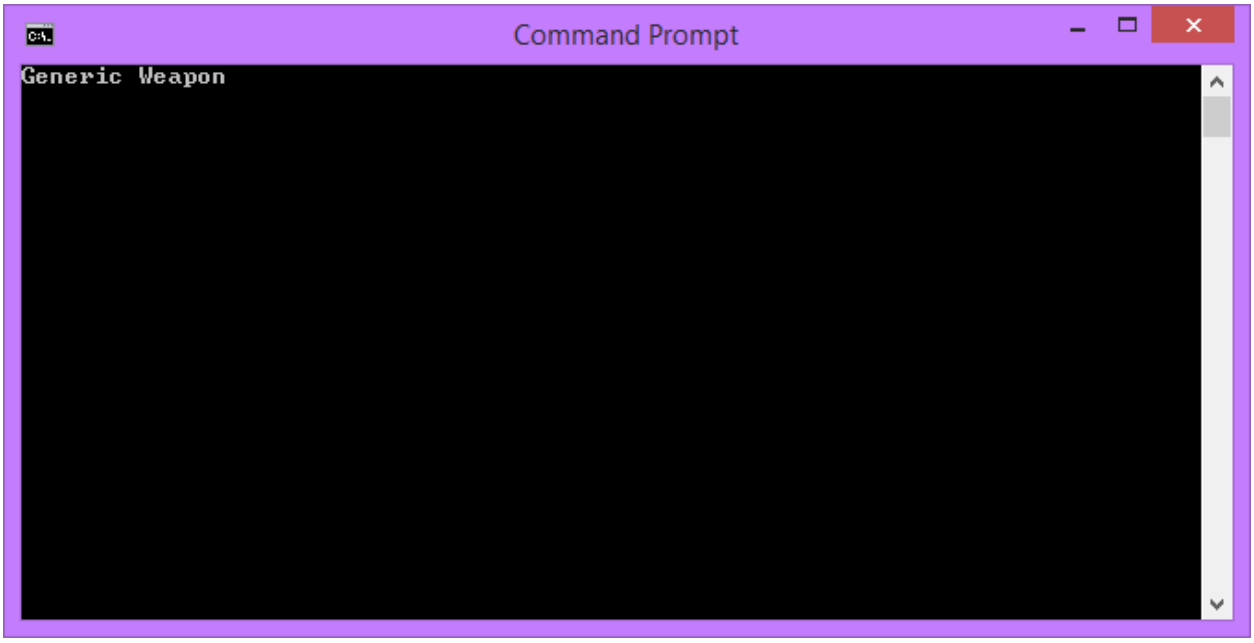
Chapter 2

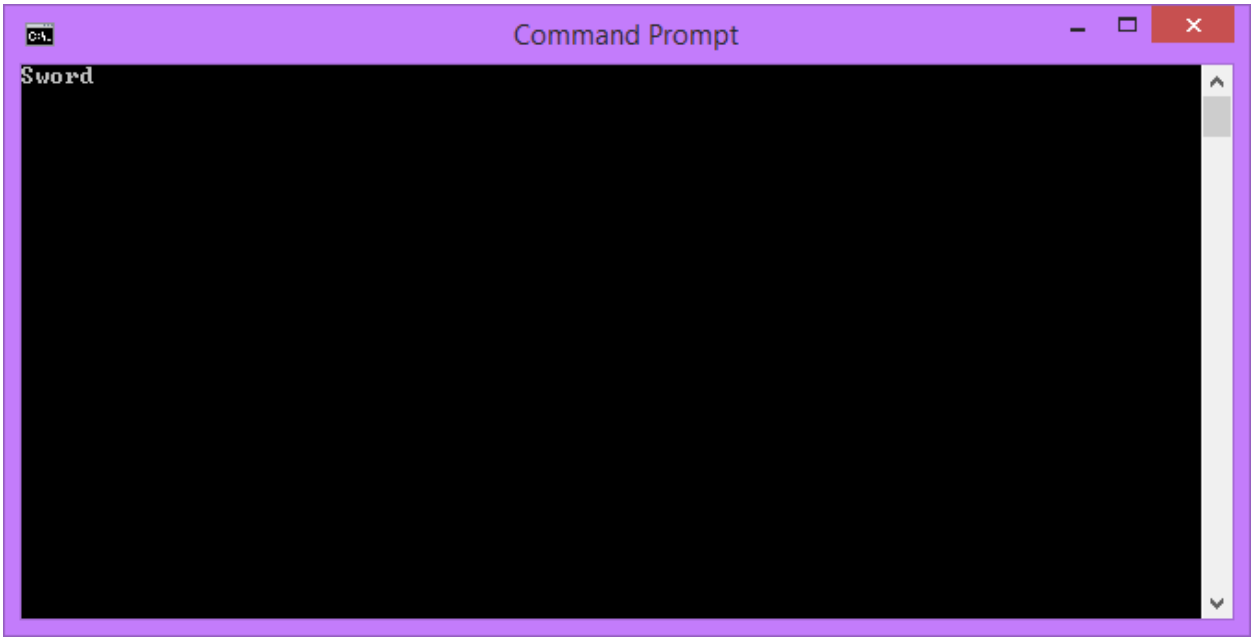

Object
class
Game
class
Input
class
Level
class
Tile
Struct
public
public
public
Chest
class
Object
Player
class
Object
Weapon
class
Object
Item
class
Object
public
public
public
Sword
class
Weapon
Wand
class
Weapon
Axe
class
Weapon

level_data.txt

```
[06] [10] [10] [10] [10] [10] [10] [10] [10] [10] [14] [10] [16] [10] [14] [10] [10] [10] [12]
[05] [19] [19] [19] [19] [19] [19] [19] [19] [19] [05] [19] [19] [19] [01] [19] [19] [19] [05]
[05] [19] [06] [10] [10] [10] [10] [10] [10] [10] [13] [19] [19] [19] [19] [19] [19] [19] [05]
[05] [19] [05] [19] [19] [19] [19] [19] [19] [19] [05] [19] [04] [19] [02] [10] [10] [10] [13]
[05] [19] [03] [10] [10] [10] [12] [19] [04] [19] [05] [19] [05] [19] [19] [19] [19] [19] [05]
[05] [19] [19] [19] [19] [19] [01] [19] [05] [19] [05] [19] [05] [19] [19] [04] [19] [19] [05]
[05] [19] [19] [04] [19] [19] [19] [19] [05] [19] [05] [19] [05] [19] [19] [05] [19] [19] [05]
[05] [19] [19] [01] [19] [19] [06] [10] [09] [19] [01] [19] [05] [19] [19] [05] [19] [19] [05]
[05] [19] [19] [19] [19] [19] [05] [19] [19] [19] [19] [19] [03] [10] [10] [09] [19] [19] [05]
[05] [19] [06] [10] [10] [10] [13] [19] [19] [19] [19] [19] [19] [19] [19] [19] [19] [19] [05]
[05] [19] [05] [19] [19] [19] [05] [19] [19] [19] [19] [19] [19] [19] [19] [19] [19] [19] [05]
[05] [19] [05] [19] [04] [19] [03] [10] [12] [19] [19] [02] [10] [10] [10] [10] [10] [10] [13]
[05] [19] [05] [19] [05] [19] [19] [19] [01] [19] [19] [19] [19] [19] [19] [19] [19] [19] [05]
[05] [19] [05] [19] [03] [12] [19] [19] [19] [19] [19] [19] [19] [02] [10] [12] [19] [19] [05]
[05] [19] [05] [19] [19] [05] [19] [19] [19] [19] [19] [19] [19] [19] [19] [05] [19] [19] [05]
[05] [19] [01] [19] [19] [03] [10] [10] [12] [19] [19] [19] [02] [10] [10] [09] [19] [19] [05]
[05] [19] [19] [19] [19] [19] [19] [19] [05] [19] [19] [19] [19] [19] [19] [19] [19] [19] [05]
[05] [19] [19] [19] [19] [19] [19] [19] [05] [19] [19] [19] [19] [19] [19] [19] [19] [19] [05]
[03] [10] [10] [10] [10] [10] [10] [10] [11] [10] [10] [10] [10] [18] [10] [10] [10] [10] [09]
```



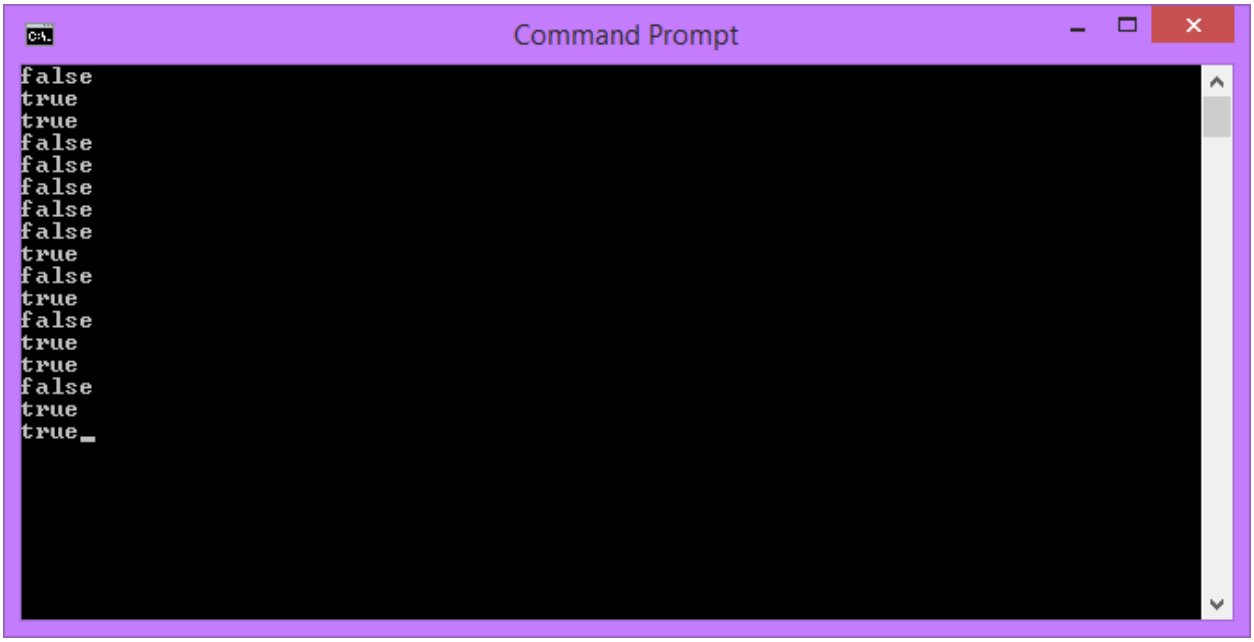

Command Prompt
Generic Weapon


Command Prompt
Sword

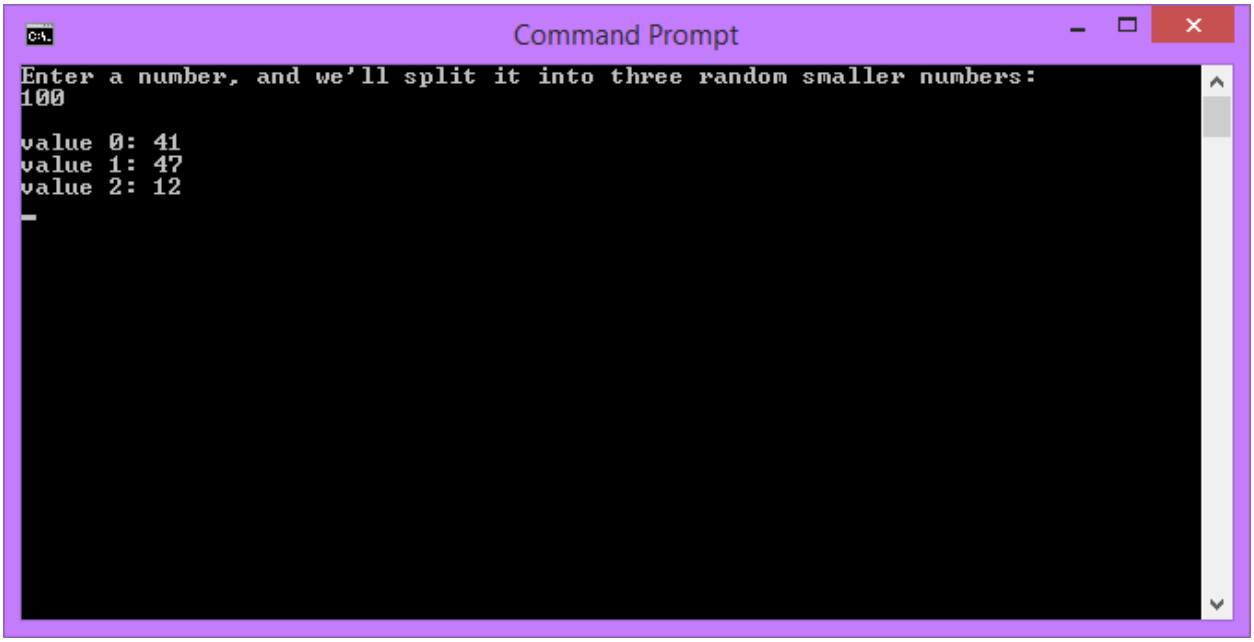
000000
000000
Floor 1
Room 0
10
10
10
10
10

000000
000000
Floor 1
Room 0
10
10
10
10
10

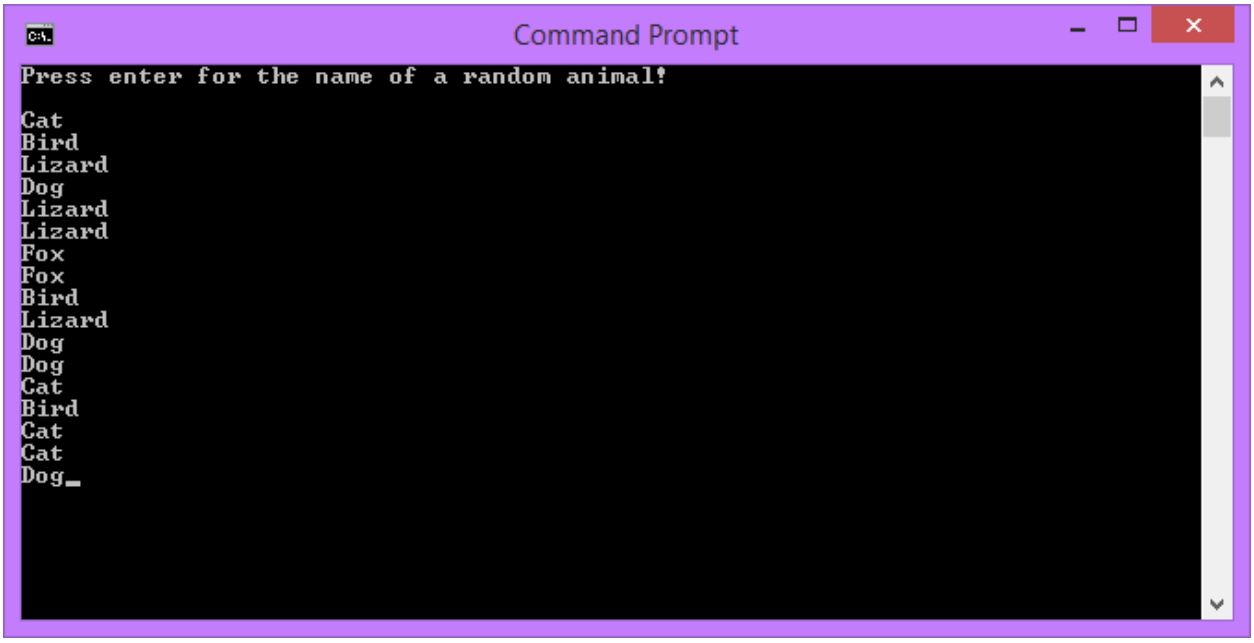
Chapter 3


Command Prompt
false
true
true
false
false
false
false
false
true
false
true
false
true
true
false
true
true

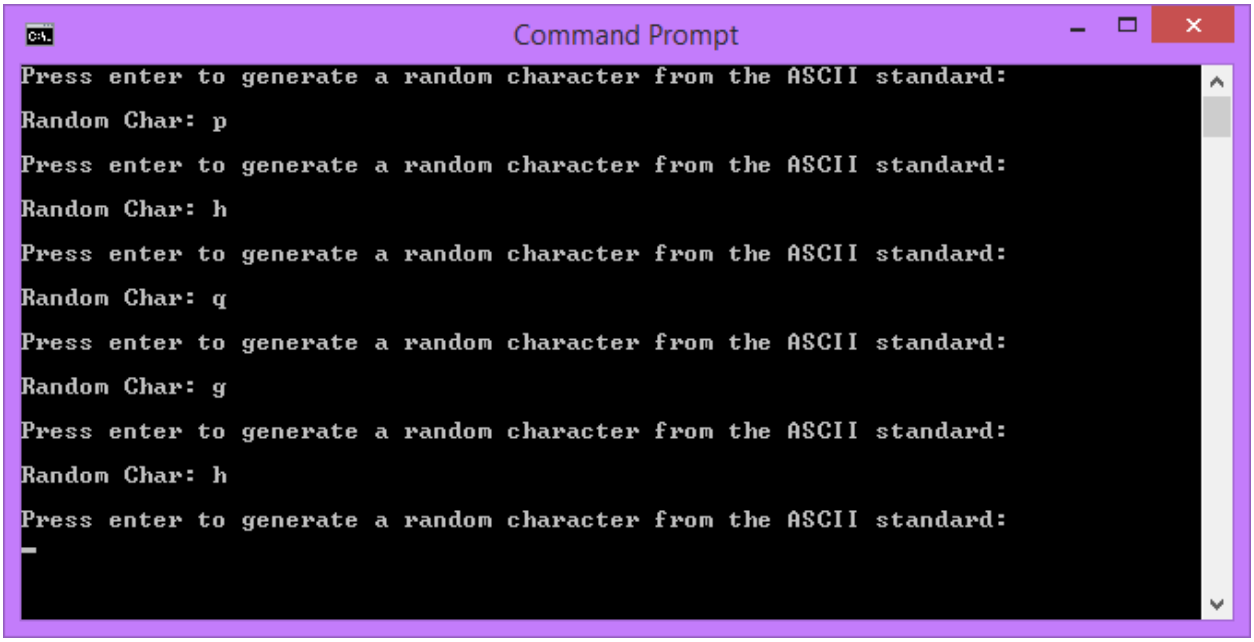
000000
000000
Floor 1
Room 0
10
10
10
10
10

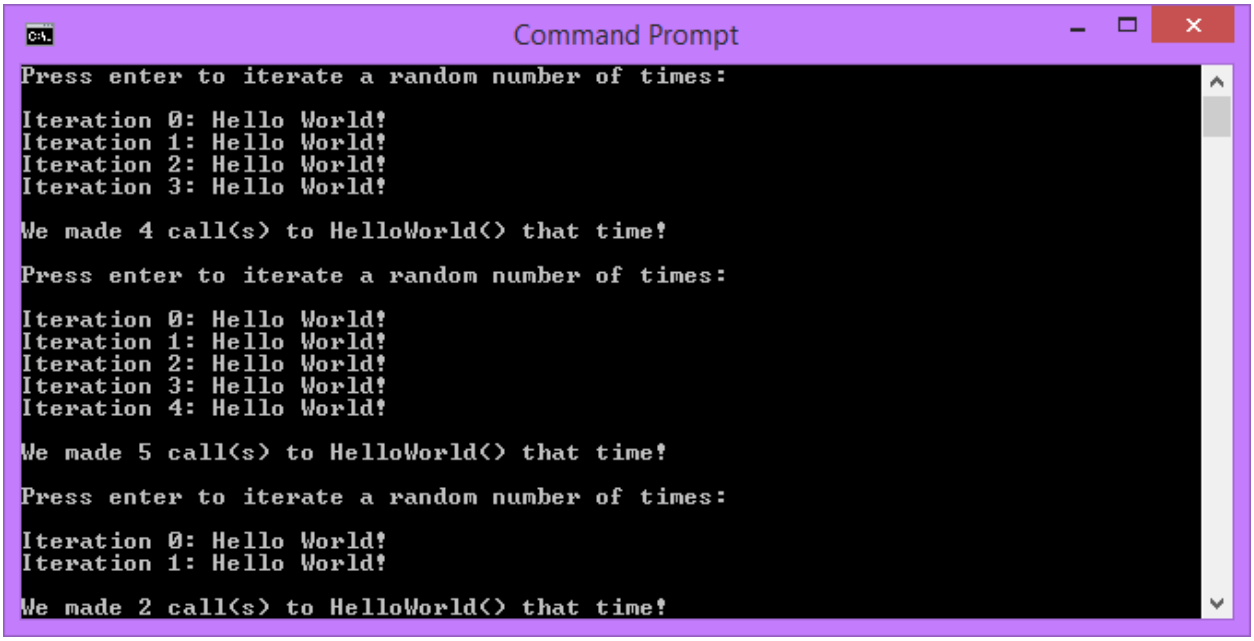

Command Prompt
Enter a number, and we'll split it into three random smaller numbers:
100
value 0: 41
value 1: 47
value 2: 12

000000
000000
Floor 1
Room 0
0
13
24
28
2


Command Prompt
Press enter for the name of a random animal!
Cat
Bird
Lizard
Dog
Lizard
Lizard
Fox
Fox
Bird
Lizard
Dog
Dog
Cat
Bird
Cat
Cat
Dog

000000
000000
Floor 1
Room 0
6
21
13
22
8


Command Prompt
Press enter to generate a random character from the ASCII standard:
Random Char: p
Press enter to generate a random character from the ASCII standard:
Random Char: h
Press enter to generate a random character from the ASCII standard:
Random Char: q
Press enter to generate a random character from the ASCII standard:
Random Char: g
Press enter to generate a random character from the ASCII standard:
Random Char: h
Press enter to generate a random character from the ASCII standard:


Command Prompt
Press enter to iterate a random number of times:
Iteration 0: Hello World!
Iteration 1: Hello World!
Iteration 2: Hello World!
Iteration 3: Hello World!
We made 4 call(s) to HelloWorld() that time!
Press enter to iterate a random number of times:
Iteration 0: Hello World!
Iteration 1: Hello World!
Iteration 2: Hello World!
Iteration 3: Hello World!
Iteration 4: Hello World!
We made 5 call(s) to HelloWorld() that time!
Press enter to iterate a random number of times:
Iteration 0: Hello World!
Iteration 1: Hello World!
We made 2 call(s) to HelloWorld() that time!

000000
000000
Floor 1
Room 0
13
5
12
5
32

Chapter 4

000000
000000
Floor 1
Room 0
13
2
14
27
11

000000
000000
Floor 1
Room 0
13
2
14
27
11

000000
000000
Floor 1
Room 0
5
8
26
18
15

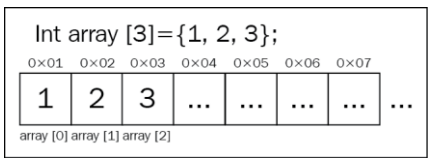
000000
000000
Floor 1
Room 0
13
20
10
27
4

000000
000000
Floor 1
Room 0
3
10
29
6
21

000000
000020
Floor 1
Room 0
16
1
18
10
21

Chapter 5

000000
000025
000000
000000
11
3
26
18
9
8
22
7
16
18
7
23
5
18
19
24

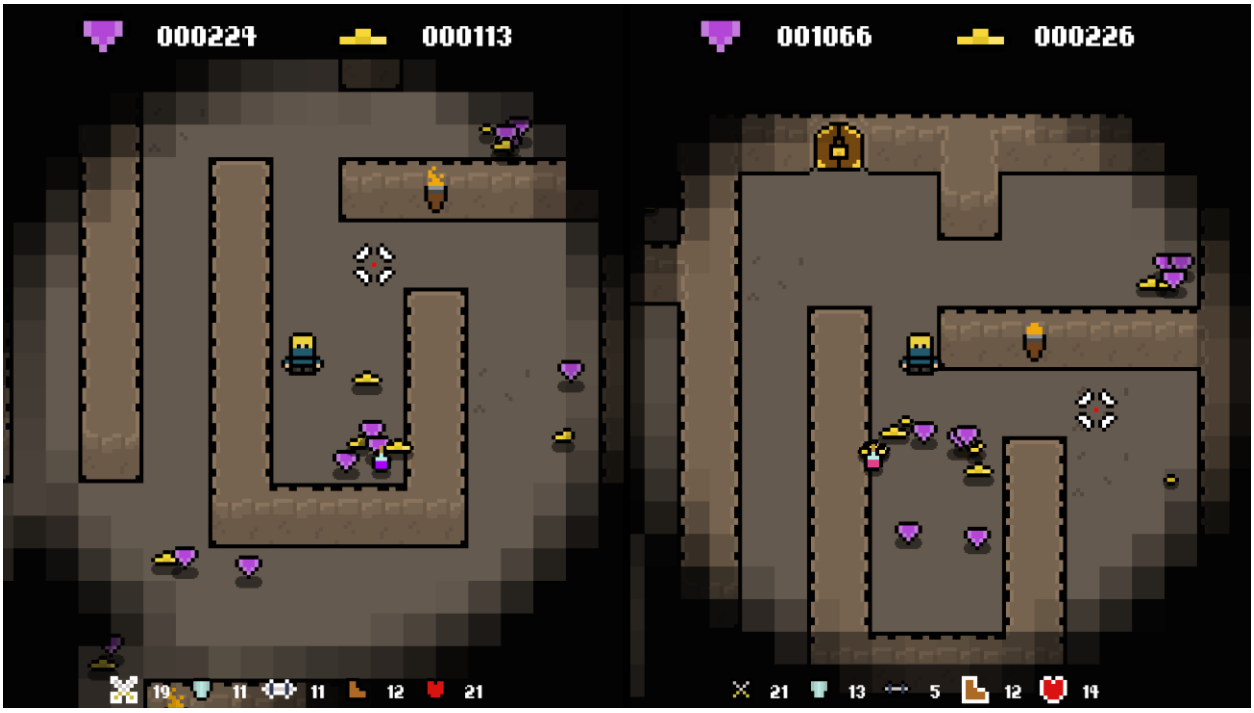

Int array [3]={1, 2, 3};
0×01
0×02
0×03
0×04
0×05
0×06
0×07
1
2
3
...
...
...
...
...
array [0] array [1] array [2]

000154
000000
Floor 1
Room 0
12
23
20
7
8

000000
000020
Floor 1
Room 0
12
8
10
29
11

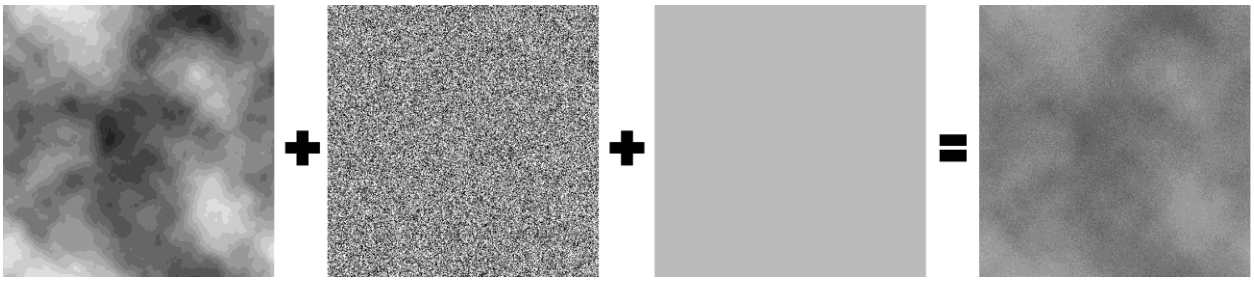
000252
000140
Floor 1
Room 0
10
18
9
13
20

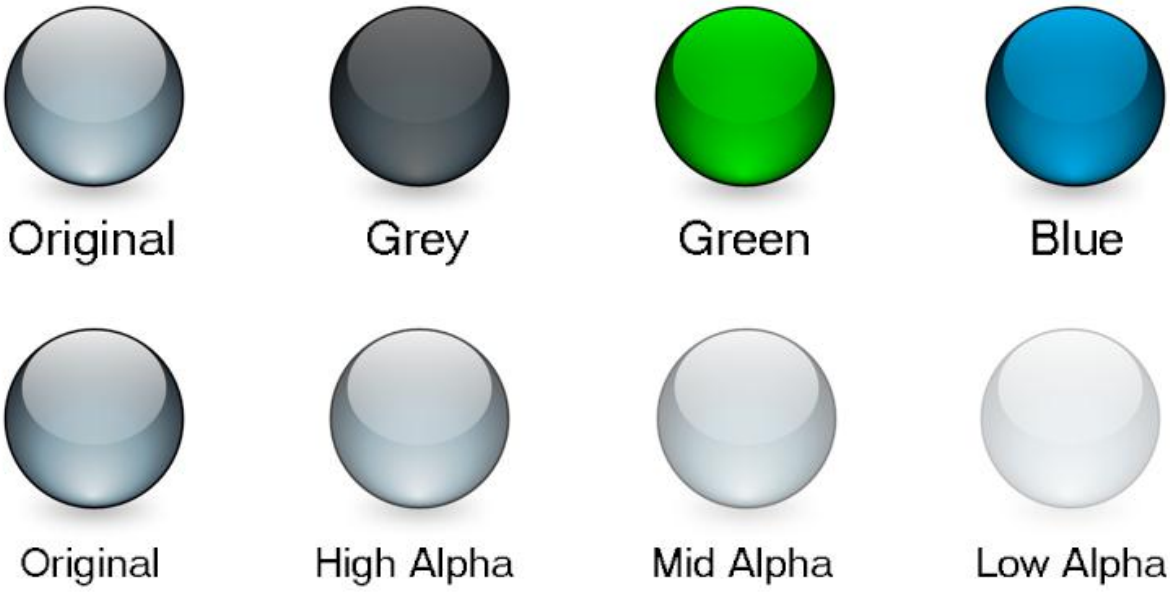
000000
000000
Floor 1
Room 0
0
2
44
22
2


000224
000113
001066
000226

Chapter 6

Original
Random Color
Random Size




Original
Grey
Green
Blue
Original
High Alpha
Mid Alpha
Low Alpha

000179
000000
Floor 1
Room 0
18
24
3
20
11

000000
000000
Floor 1
Room 0
9
11
24
0
25

000053
000000
Floor 1
Room 0
19
14
15
12
8

Original

New

Original

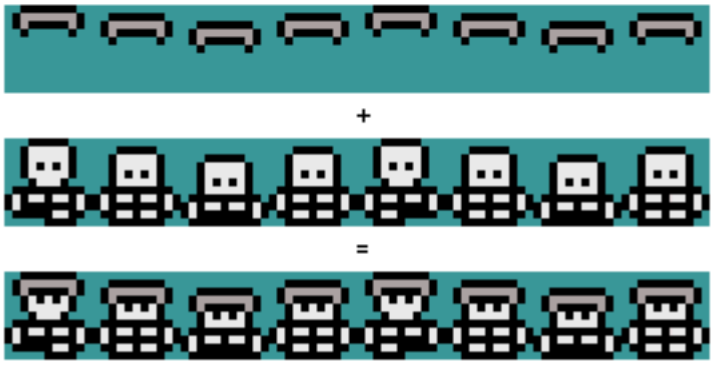
New

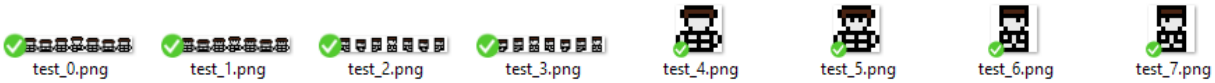
Draw Call 1

Draw Call 2

Draw Call 3

Final Image

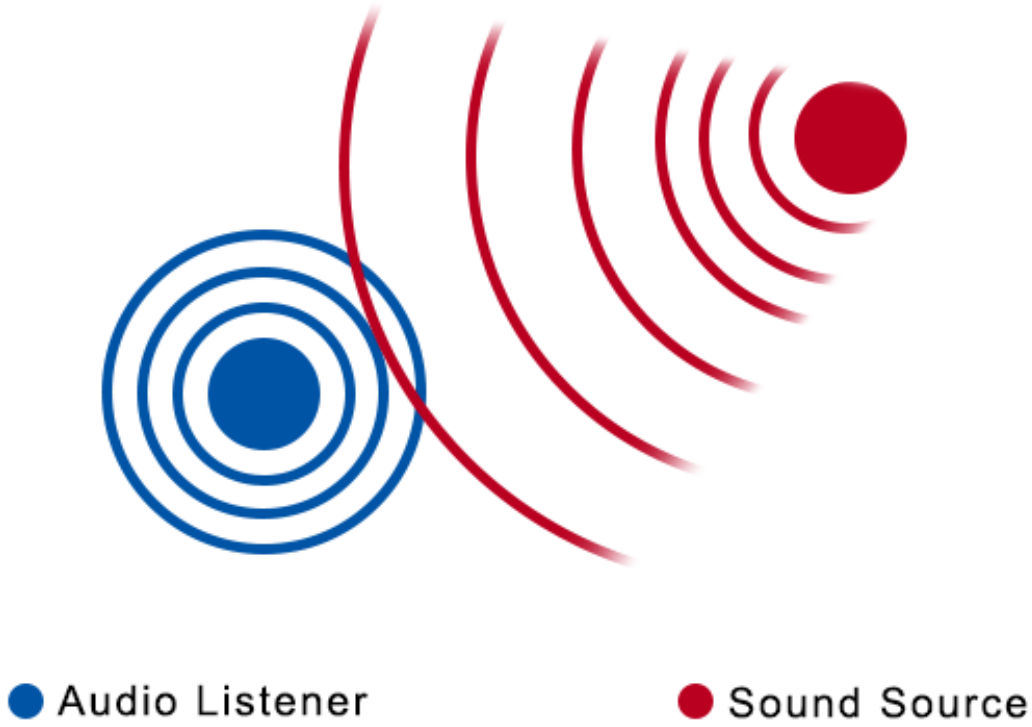


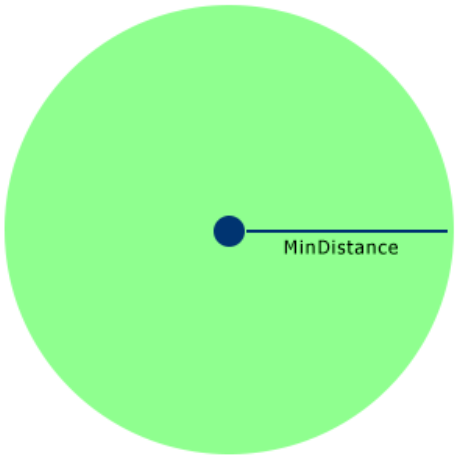

test_0.png
test_1.png
test_2.png
test_3.png
test_4.png
test_5.png
test_6.png
test_7.png

000000
000000
Floor 1
Room 0
11
27
13
18
2

000000
000000
Floor 1
Room 0
10
8
26
28
0

Chapter 7


Audio Listener
Sound Source



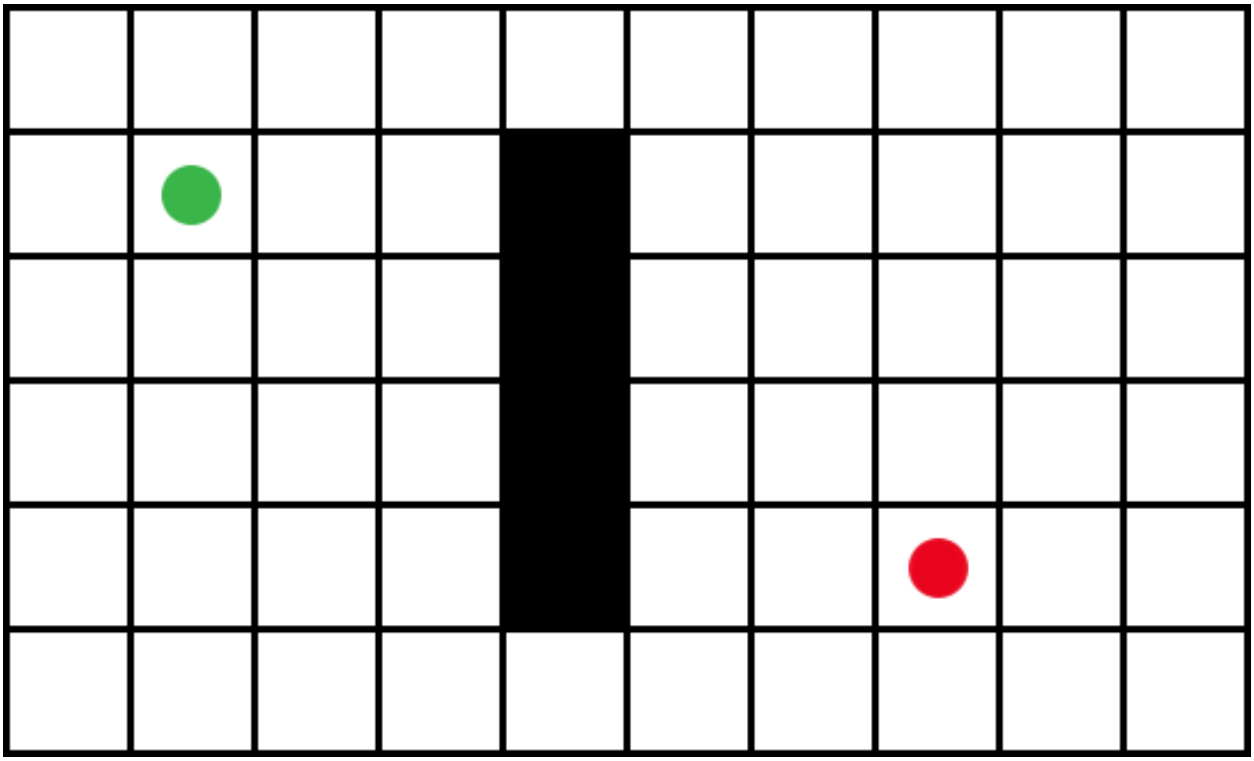
Source

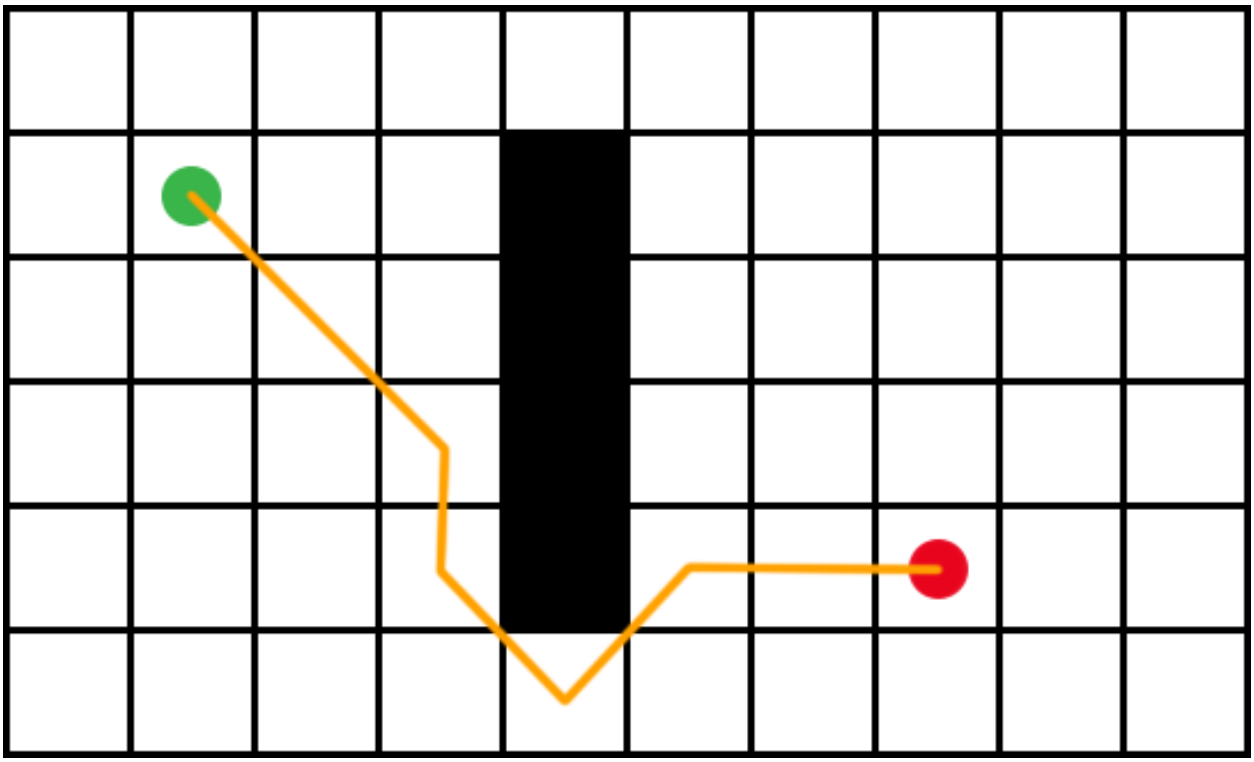
Full Volume

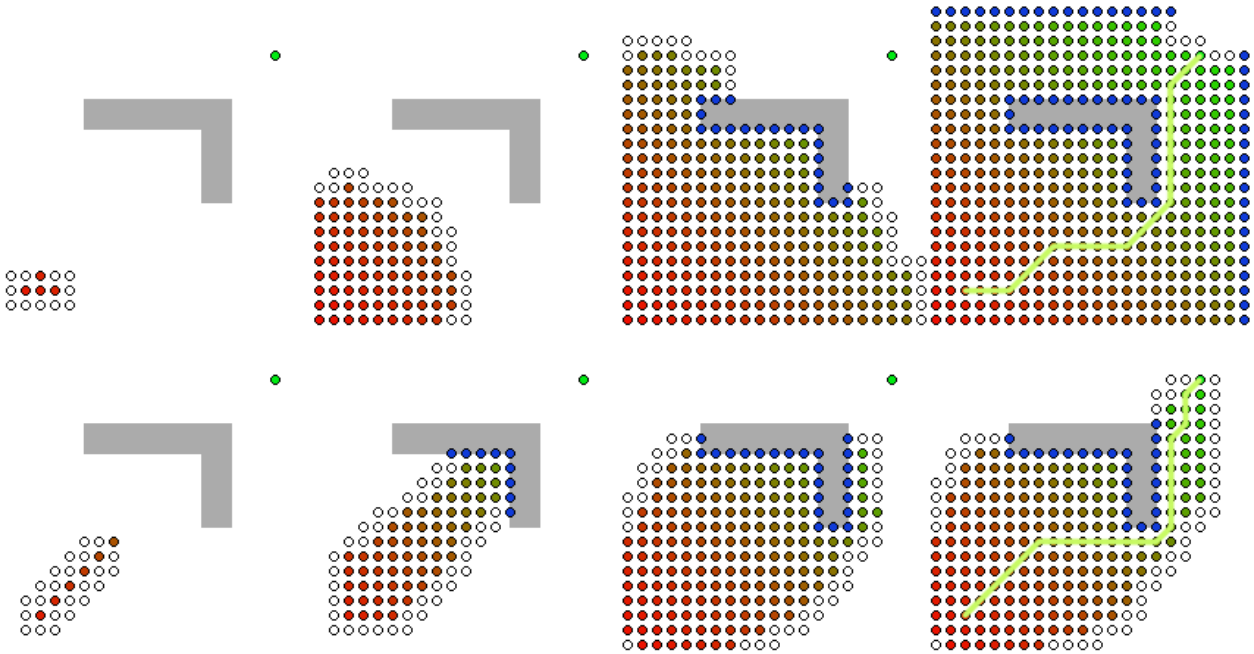
High Attenuation (Fast Dropoff)

Low Attenuation (Gradual Dropoff)

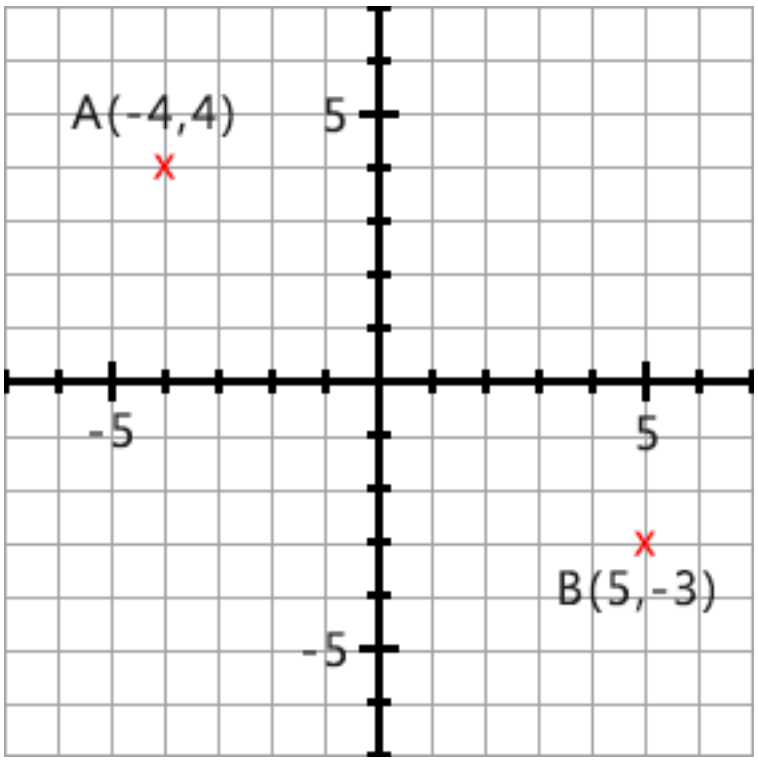
Chapter 8

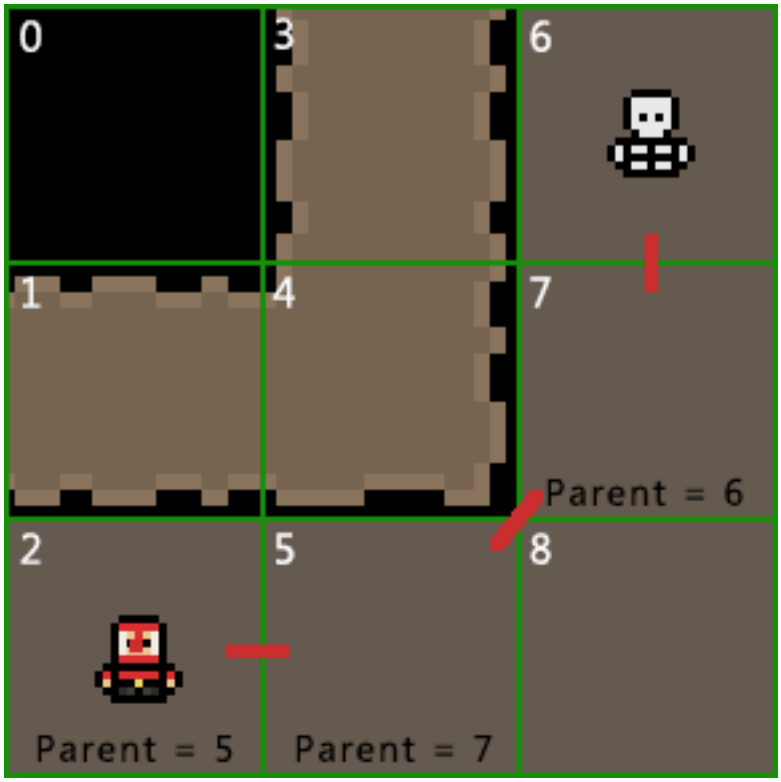


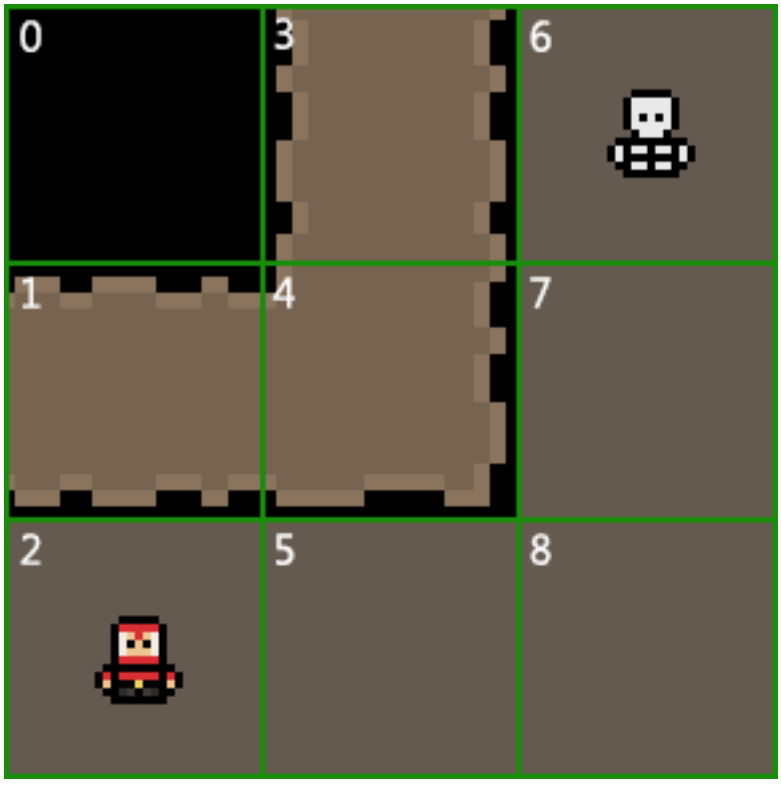


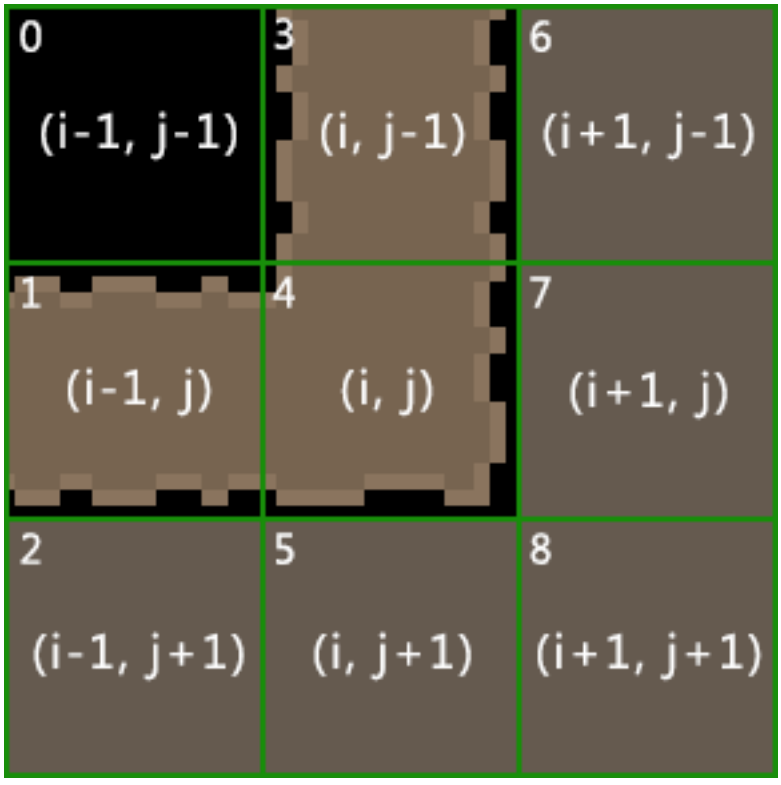


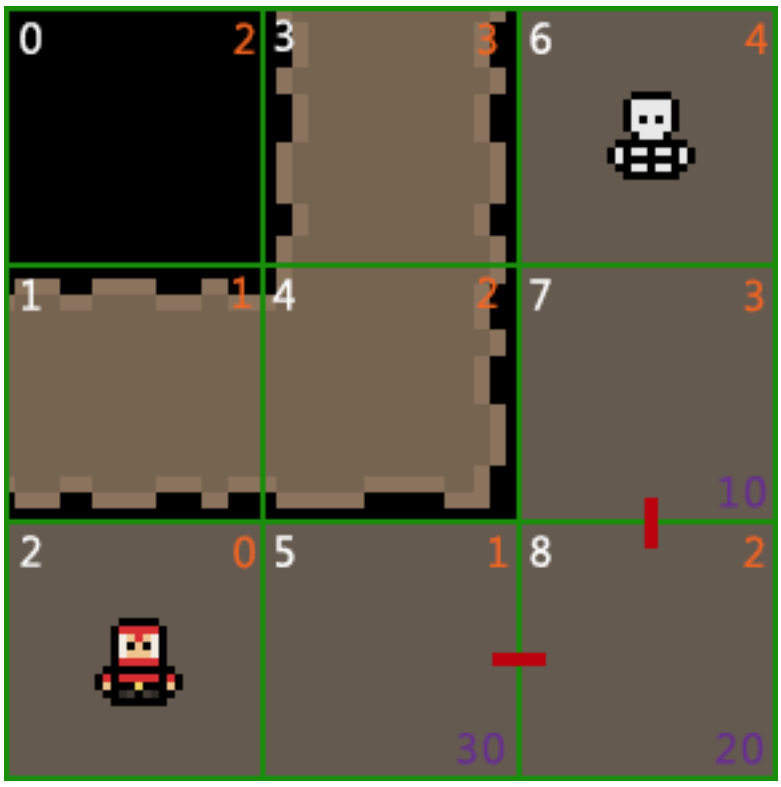
000000
000012
Floor 1
Room 0
10
15
6
10
15

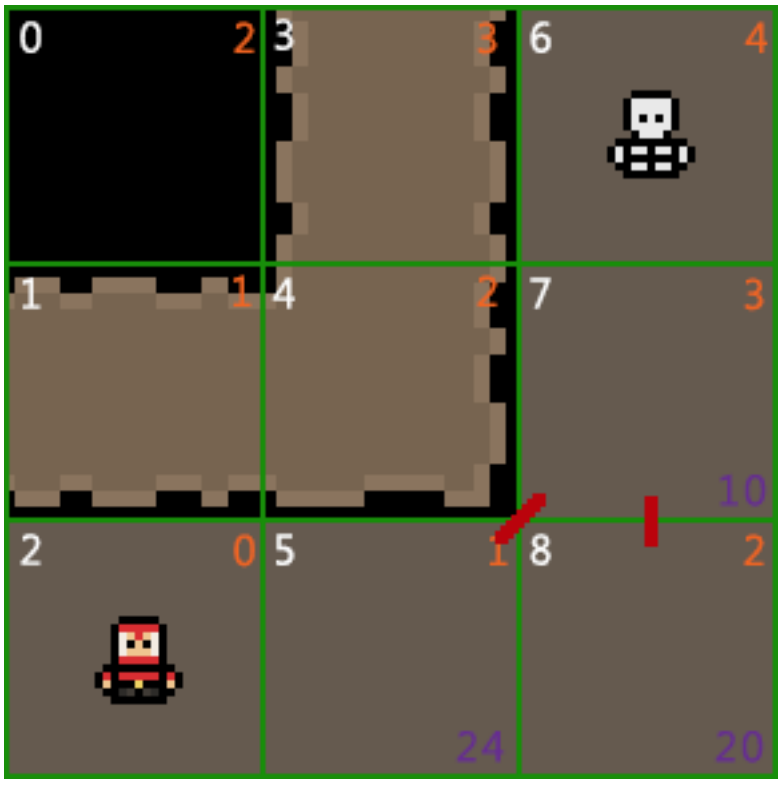

A(-4,4)
5
-5
5
B(5,-3)
-5


0
3
6
1
4
7
Parent = 6
2
5
8
Parent = 5
Parent = 7


0
3
6
1
4
7
2
5
8


0
(i-1, j-1)
3
(i, j-1)
6
(i+1, j-1)
1
(i-1, j)
4
(i, j)
7
(i+1, j)
2
(i-1, j+1)
5
(i, j+1)
8
(i+1, j+1)

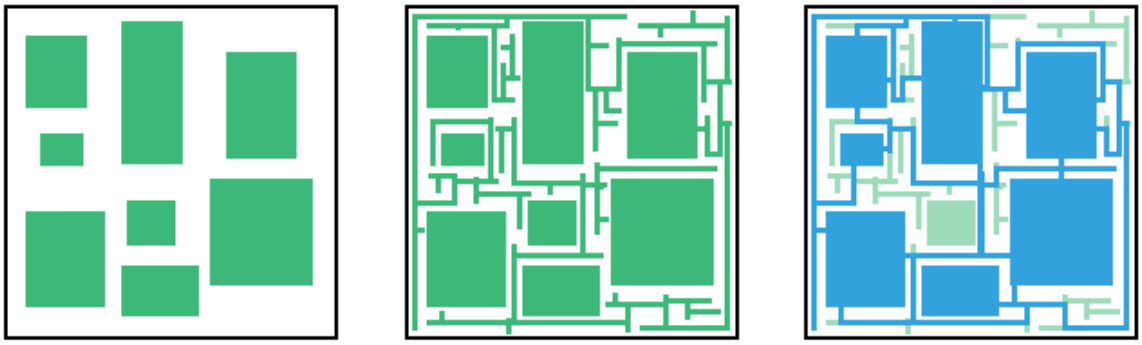

0
2
3
3
6
4
1
1
4
2
7
3
10
2
0
5
1
8
2
30
20


0
2
3
3
6
4
1
1
4
2
7
3
10
2
0
5
1
8
2
24
20

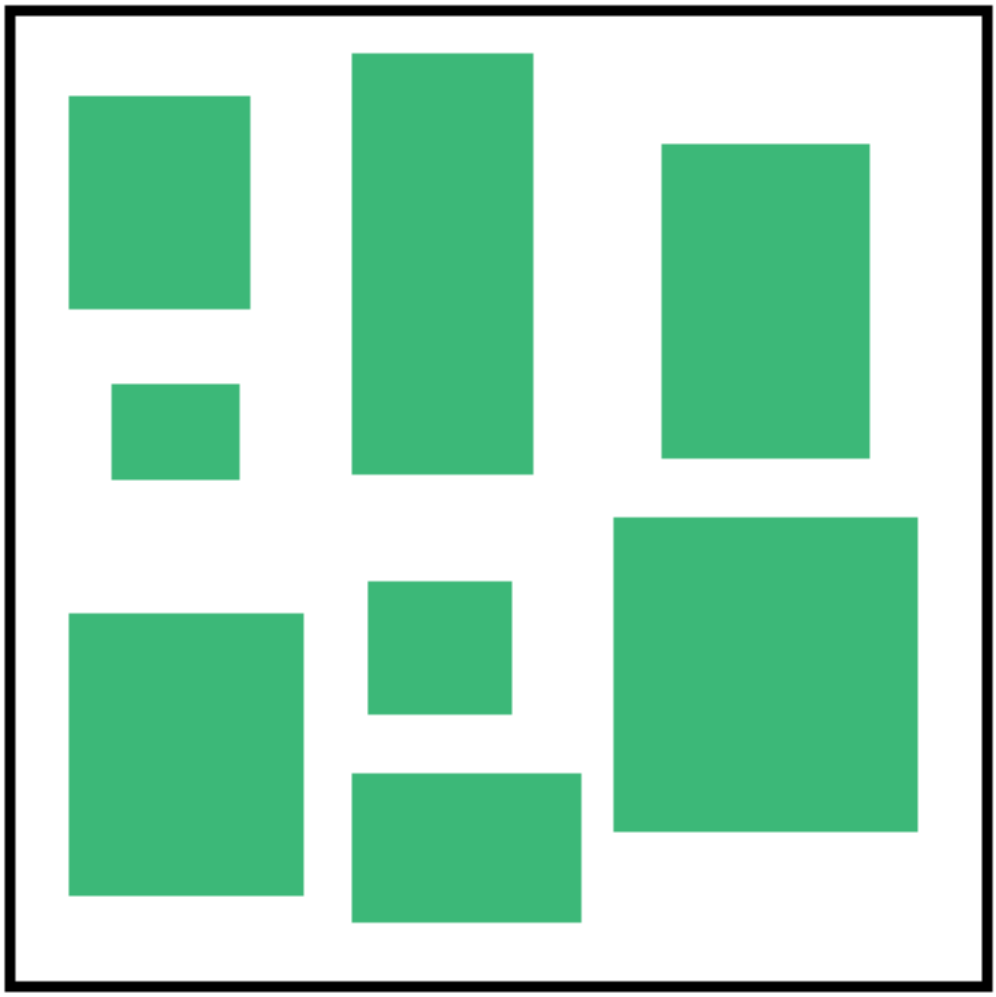
000051
000000
Floor 1
Room 0
0
24
25
5
17

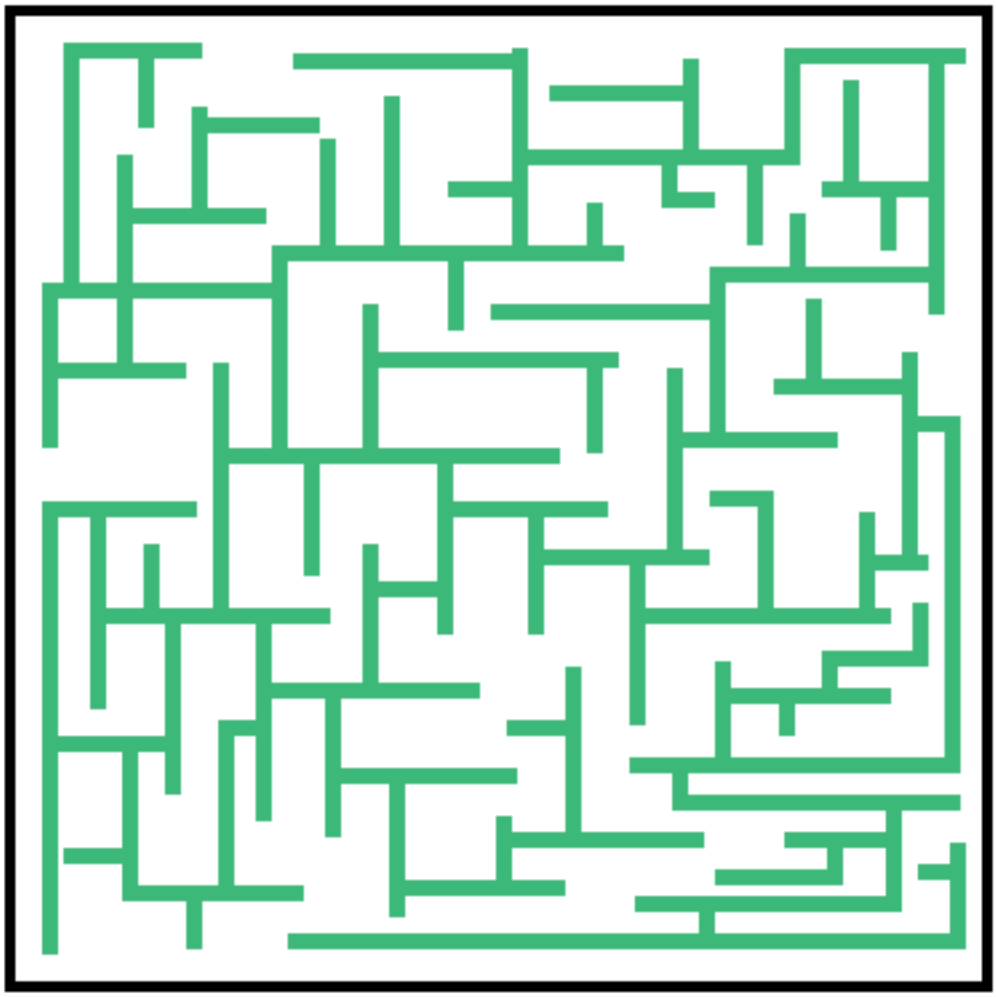
000919
000340
Floor 1
Room 0
14
33
3
10
9

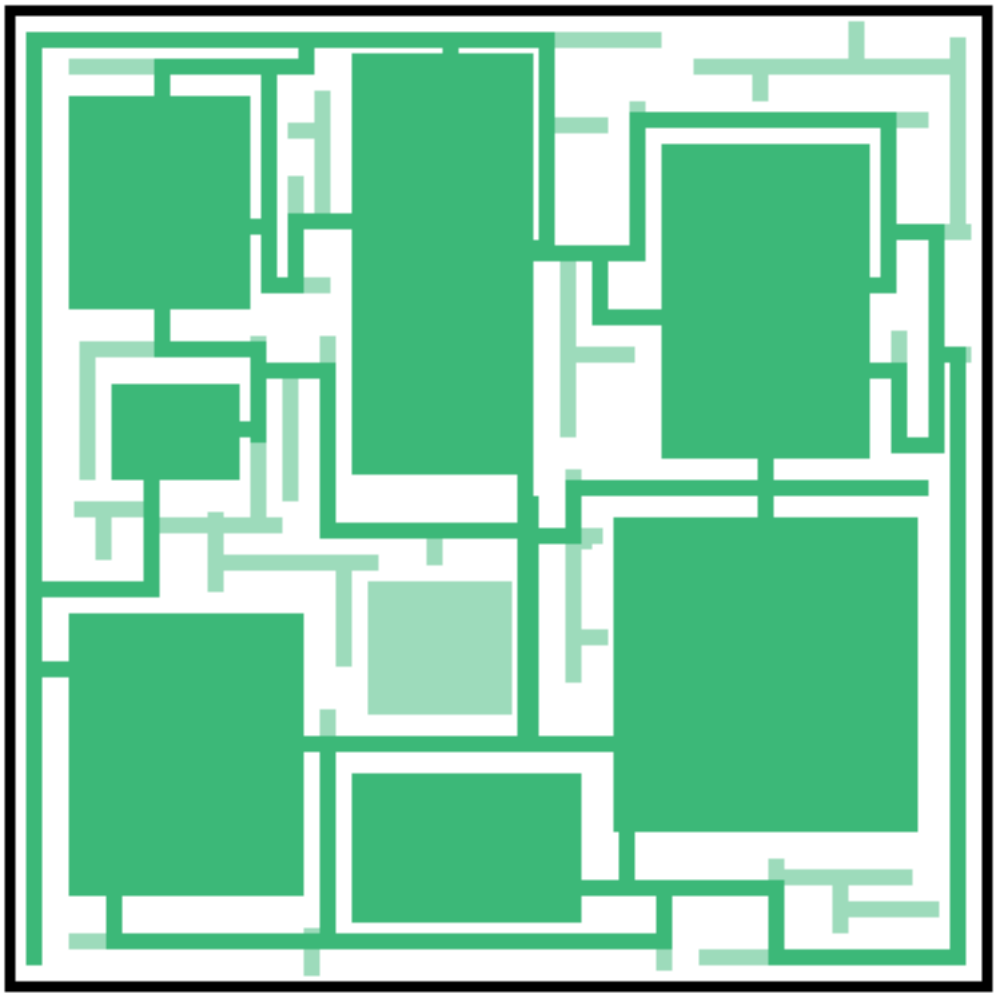
Chapter 9

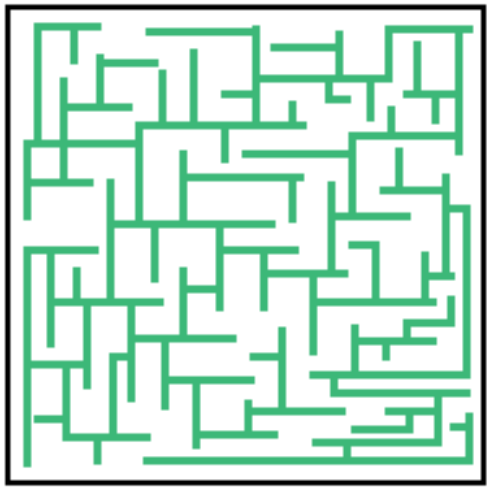


Generate Rooms | Generate maze | Join together

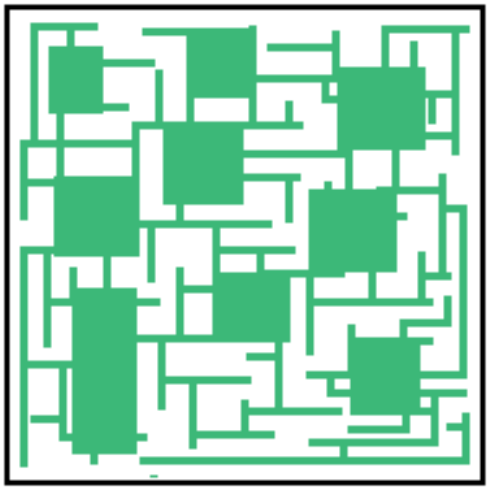






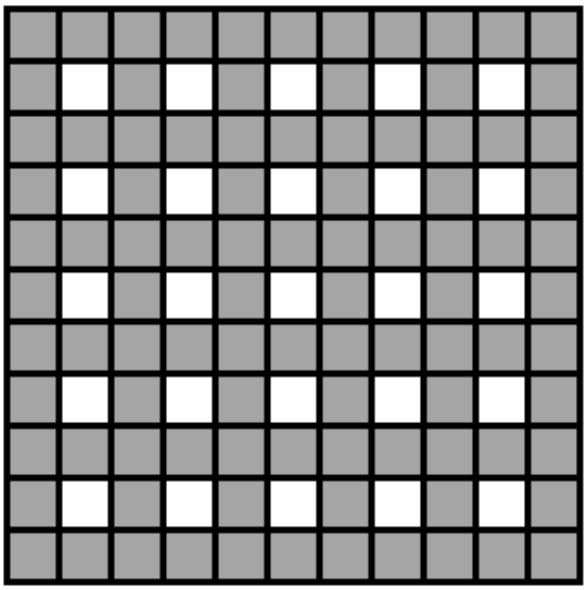


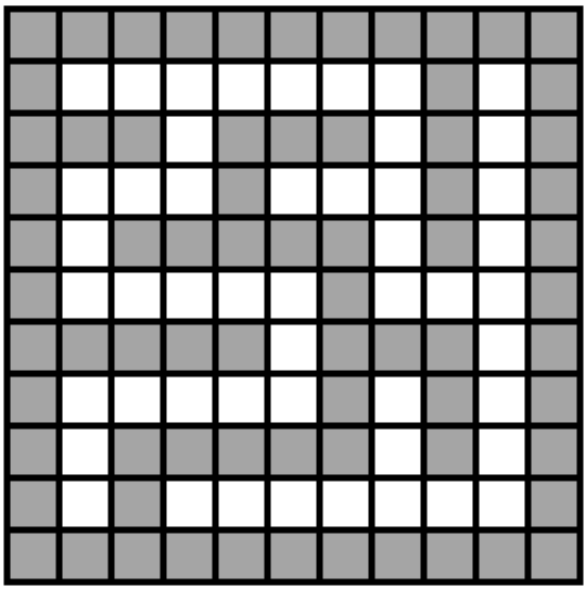
Generate maze

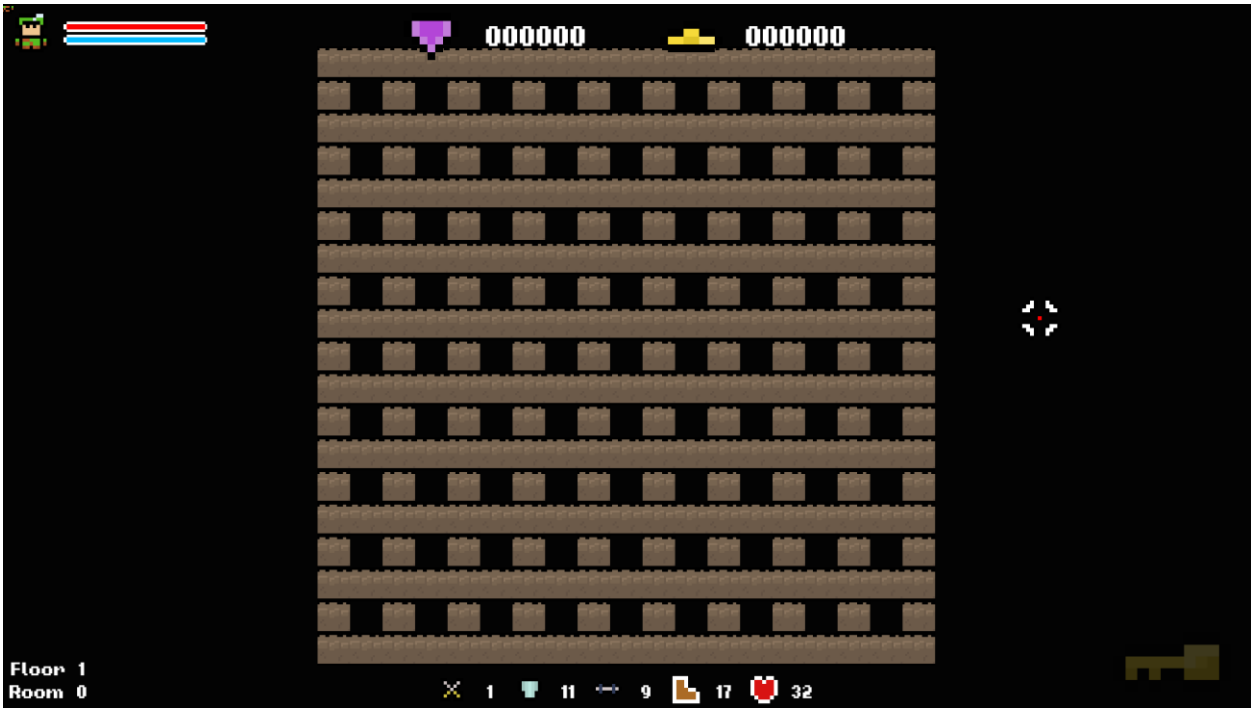


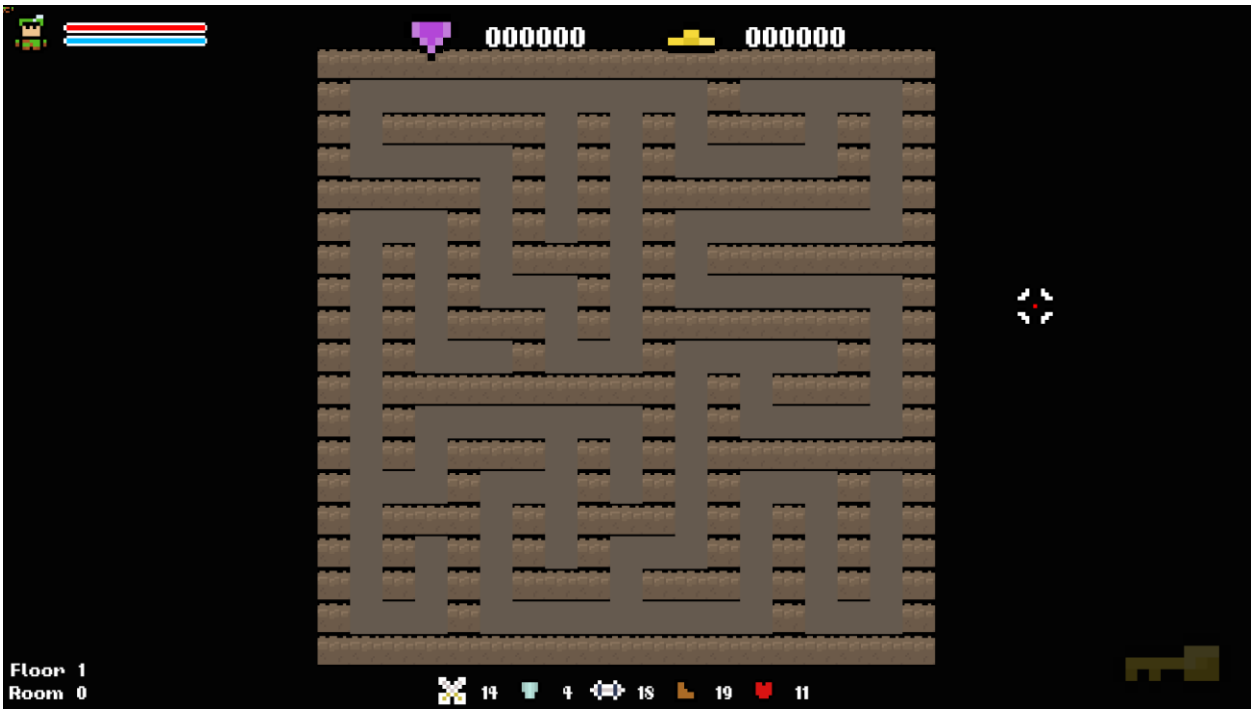
Generate Rooms

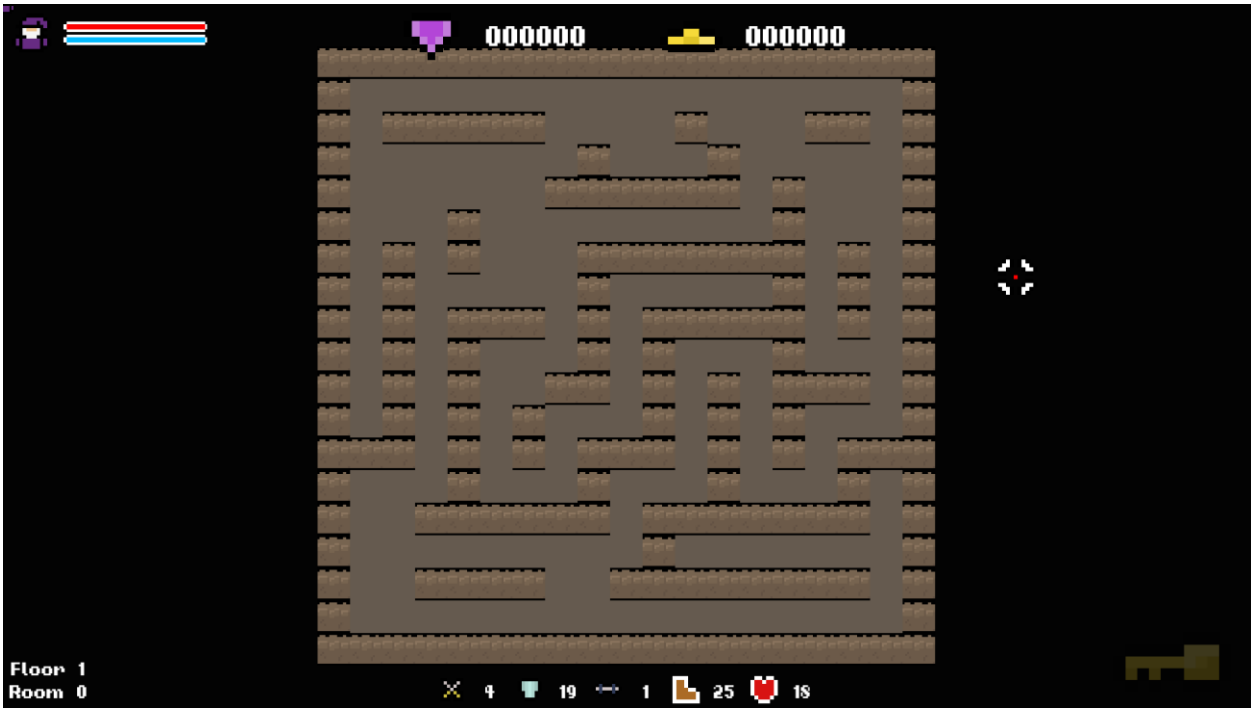
000012
000019
Floor 1
Room 0
11
14
10
13
21

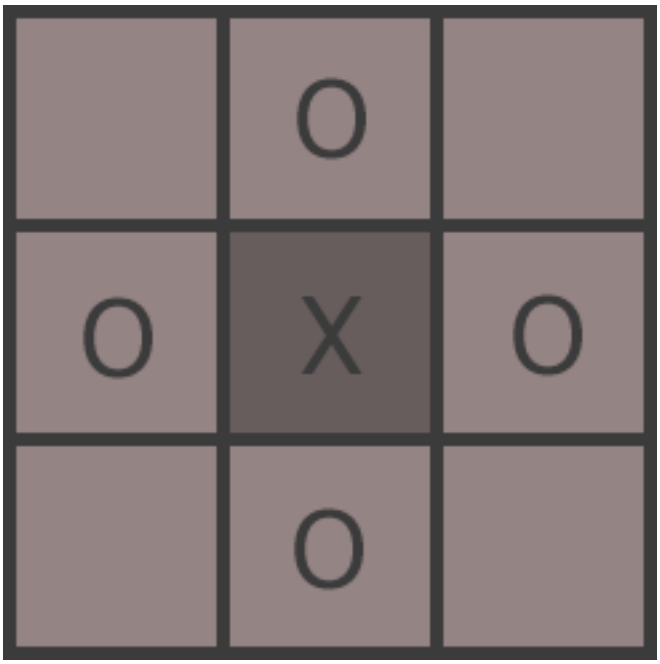


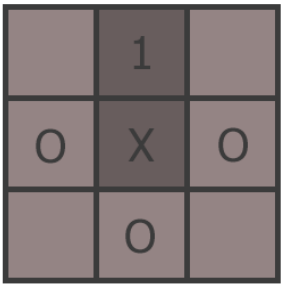



000000
000000
Floor 1
Room 0
1
11
9
17
32

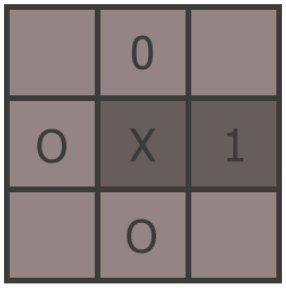

000000
000000
Floor 1
Room 0
14
4
18
19
11


000000
000000
Floor 1
Room 0
4
19
1
25
18

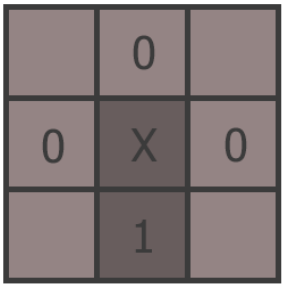

O
O
X
O
O



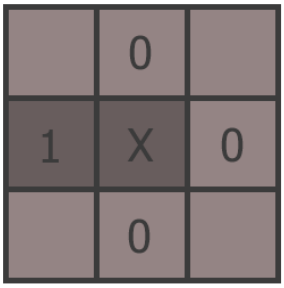
0001 = 1



0010 = 2



0100 = 4



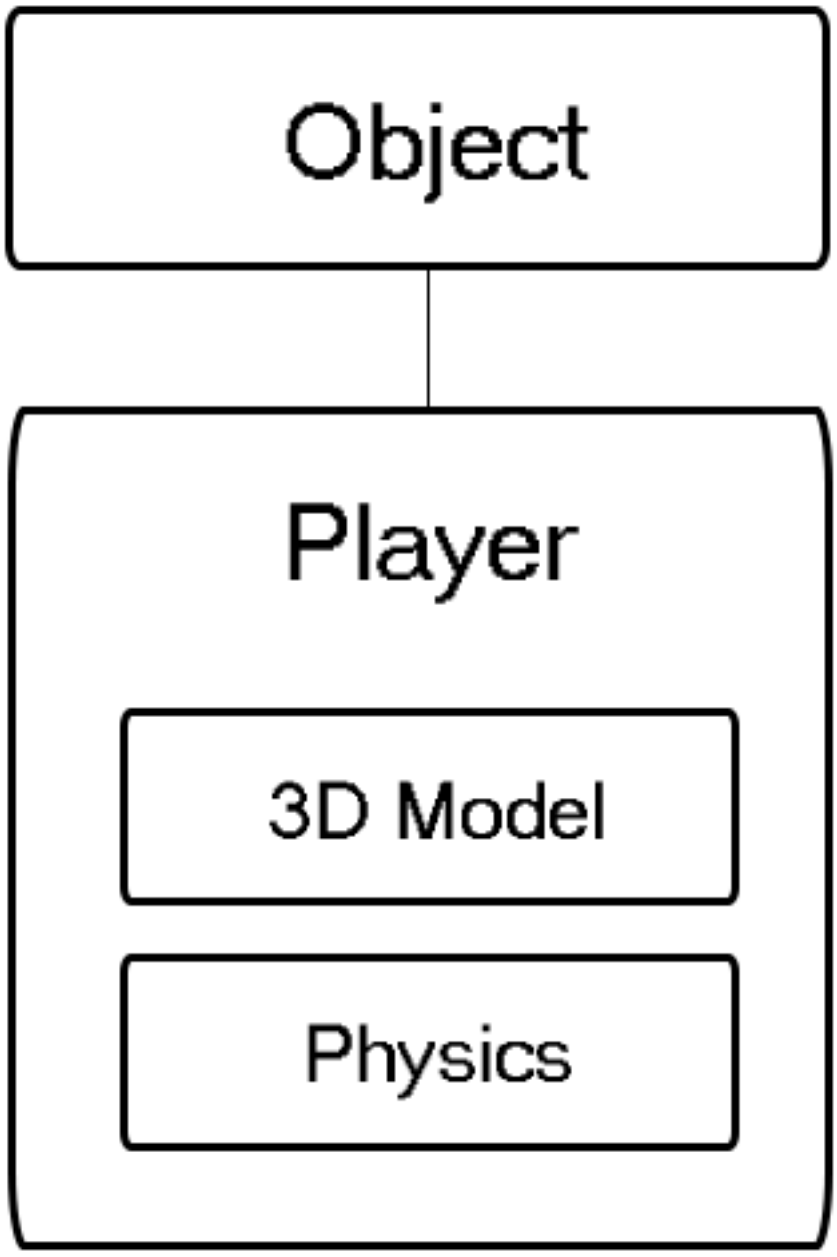
1000 = 8

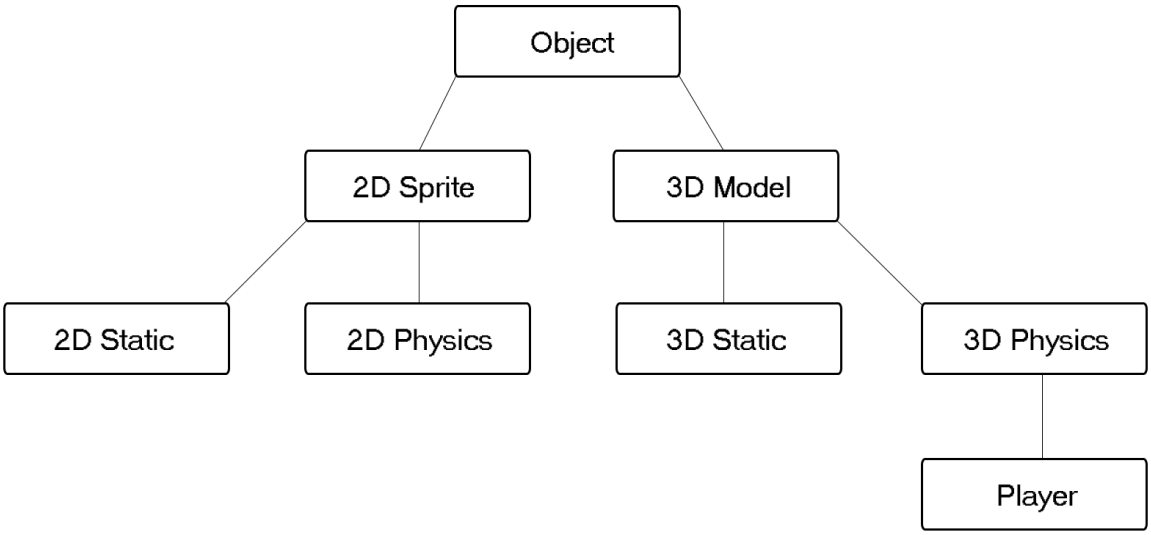
000000
000000
Floor 1
Room 1
19
20
14
8
18

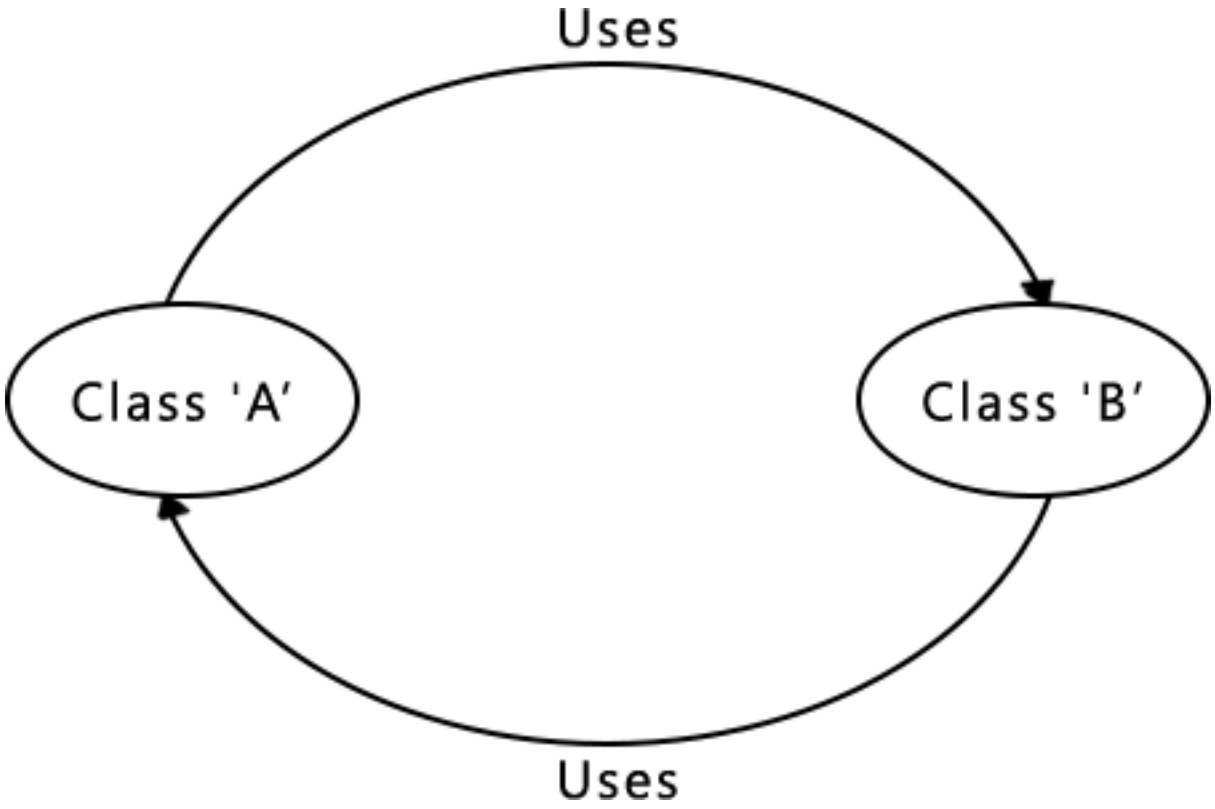
000000
000000
Floor 1
Room 1
12
23
15
4
19

000000
000000
Floor 1
Room 1
16
18
13
6
15

Chapter 10




Object
2D Sprite
3D Model
2D Static
2D Physics
3D Static
3D Physics
Player


Uses
Class 'A'
Class 'B'
Uses

000000
000015
Current Goal: Collect 5 gem!
Floor 1
Room 1
14
17
10
11
20

000000
000037
Floor 1
Room 1
16
1
20
24
5