

GUPy Coding Examples (without variables)

EXAMPLE A 1. <code>Tile(PINK).place(4,3)</code> 2. <code>Tile(PINK).place(6,2)</code> 3. <code>Tile(PINK).place(8,3)</code> 4. <code>Tile(YELLOW).place(3,8)</code> 5. <code>Tile(YELLOW).place(9,8)</code> 6. <code>Tile(YELLOW).place(6,6)</code>	EXAMPLE B 1. <code>Tile(YELLOW).place(6,6)</code> 2. <code>Tile(PINK).place(4,6)</code> 3. <code>Tile(PINK).place(8,6)</code> 4. <code>Tile(PINK).place(5,4)</code> 5. <code>Tile(PINK).place(7,8)</code> 6. <code>Tile(PINK).place(5,8)</code> 7. <code>Tile(YELLOW).place(7,6)</code>
EXAMPLE C 1. <code>PIN1.place(0,0)</code> 2. <code>Tile(YELLOW).place(PIN1)</code> 3. <code>PIN1.shift(UP,2)</code> 4. <code>PIN1.shift(RIGHT,2)</code> 5. <code>Tile(YELLOW).place(PIN1)</code> 6. <code>PIN1.shift(UP,2)</code> 7. <code>PIN1.shift(RIGHT,2)</code> 8. <code>Tile(YELLOW).place(PIN1)</code> 9. <code>PIN1.shift(RIGHT,2)</code> 10. <code>PIN1.shift(DOWN,2)</code> 11. <code>Tile(YELLOW).place(PIN1)</code> 12. <code>PIN1.shift(RIGHT,2)</code> 13. <code>PIN1.shift(DOWN,2)</code> 14. <code>Tile(YELLOW).place(PIN1)</code>	EXAMPLE D 1. <code>PIN1.place(0,0)</code> 2. <code>PIN2.place(0,2)</code> 3. <code>Tile(YELLOW).place(PIN1)</code> 4. <code>Tile(PINK).place(PIN2)</code> 5. <code>PIN1.shift(RIGHT,2)</code> 6. <code>PIN2.shift(RIGHT,2)</code> 7. <code>Tile(PINK).place(PIN1)</code> 8. <code>Tile(YELLOW).place(PIN2)</code> 9. <code>PIN1.shift(RIGHT,2)</code> 10. <code>PIN2.shift(RIGHT,2)</code> 11. <code>Tile(YELLOW).place(PIN1)</code> 12. <code>Tile(PINK).place(PIN2)</code> 13. <code>PIN1.shift(RIGHT,2)</code> 14. <code>PIN2.shift(RIGHT,2)</code> 15. <code>Tile(PINK).place(PIN1)</code> 16. <code>Tile(YELLOW).place(PIN2)</code>
EXAMPLE E 1. <code>PIN1.place(roll(),roll())</code> 2. <code>Tile(YELLOW).place(PIN1)</code> 3. <code>PIN1.shift(UP,2)</code> 4. <code>PIN1.shift(RIGHT,2)</code> 5. <code>Tile(YELLOW).place(PIN1)</code> 6. <code>PIN1.shift(UP,2)</code> 7. <code>PIN1.shift(RIGHT,2)</code> 8. <code>Tile(RANDOM).place(PIN1)</code> 9. <code>PIN1.shift(RIGHT,2)</code> 10. <code>PIN1.shift(DOWN,2)</code> 11. <code>Tile(YELLOW).place(PIN1)</code> 12. <code>PIN1.shift(RIGHT,2)</code> 13. <code>PIN1.shift(DOWN,2)</code> 14. <code>Tile(YELLOW).place(PIN1)</code>	EXAMPLE F 1. <code>PIN1.place(roll(),roll())</code> 2. <code>PIN2.place(PIN1)</code> 3. <code>PIN2.shift(UP,2)</code> 4. <code>Tile(YELLOW).place(PIN1)</code> 5. <code>PIN1.shift(RIGHT,2)</code> 6. <code>Tile(PINK).place(PIN1)</code> 7. <code>PIN1.shift(RIGHT,2)</code> 8. <code>Tile(YELLOW).place(PIN1)</code> 9. <code>PIN1.shift(RIGHT,2)</code> 10. <code>Tile(PINK).place(PIN1)</code> 11. <code>Tile(PINK).place(PIN2)</code> 12. <code>PIN2.shift(RIGHT,2)</code> 13. <code>Tile(YELLOW).place(PIN2)</code> 14. <code>PIN2.shift(RIGHT,2)</code> 15. <code>Tile(PINK).place(PIN2)</code> 16. <code>PIN2.shift(RIGHT,2)</code> 17. <code>Tile(YELLOW).place(PIN2)</code>

GUtPy Coding Examples (with variables)

EXAMPLE G 1. <code>x = roll()</code> 2. <code>Tile(RANDOM).place(x,6)</code> 3. <code>Tile(RANDOM).place(x+2,6)</code> 4. <code>Tile(RANDOM).place(x+4,6)</code> 5. <code>Tile(RANDOM).place(x+6,6)</code>	EXAMPLE H 1. <code>x = roll()</code> 2. <code>y = roll()</code> 3. <code>Tile(YELLOW).place(x,y)</code> 4. <code>d = x+2</code> 5. <code>i = y+2</code> 6. <code>Tile(PINK).place(d,i)</code> 7. <code>x = d+2</code> 8. <code>y = i+2</code> 9. <code>Tile(YELLOW).place(x,y)</code>
EXAMPLE J 1. <code>d = roll()/2</code> (TRUNCATED) 2. <code>x = roll()</code> 3. <code>Tile(RANDOM).place(x,6)</code> 4. <code>x = x + d</code> 5. <code>Tile(RANDOM).place(x,6)</code> 6. <code>x = x + 2*d</code> 7. <code>Tile(RANDOM).place(x,6)</code>	EXAMPLE K 1. <code>x = roll() + 2</code> 2. <code>y = roll()</code> 3. <code>Tile(YELLOW).place(x,y)</code> 4. <code>x = x + 2</code> 5. <code>y = y + 2</code> 6. <code>Tile(PINK).place(x,y)</code> 7. <code>x = x + 2</code> 8. <code>y = y + 2</code> 9. <code>Tile(YELLOW).place(x,y)</code>
EXAMPLE L 1. <code>tile = Tile(RANDOM)</code> 2. <code>color = tile.getColor()</code> 3. <code>tile.place(roll(),roll())</code> 4. <code>Tile(color).place(roll(),roll())</code> 5. <code>Tile(color).place(roll(),roll())</code>	EXAMPLE M 1. <code>tile = Tile(RANDOM)</code> 2. <code>color = tile.getColor()</code> 3. <code>x = roll()</code> 4. <code>y = x</code> 5. <code>tile.place(x,y)</code> 6. <code>Tile(color).place(x+roll(),y)</code> 7. <code>Tile(color).place(x-roll(),y)</code>

GUPy Coding Examples (with if-statements)

Note: indentation under an if-statement means that all of those indented lines of code should be executed when (and only when) the expression is true.

EXAMPLE N 1. <code>x = roll() + roll()</code> 2. <code>if x > 10:</code> 3. <code>x = 10</code> 4. <code>Tile(RANDOM).place(x,6)</code> 5. <code>Tile(RANDOM).place(x+2,6)</code>	EXAMPLE O 1. <code>color = YELLOW</code> 2. <code>x = roll()</code> 3. <code>if x > 3:</code> 4. <code>color = PINK</code> 5. <code>Tile(color).place(6,6)</code> 6. <code>Tile(color).place(8,6)</code>
EXAMPLE P 1. <code>y = roll()</code> 2. <code>Tile(RANDOM).place(6,y)</code> 3. <code>y = y - 2</code> 4. <code>if not (y == -1):</code> 5. <code>Tile(RANDOM).place(6,y)</code>	EXAMPLE Q 1. <code>y = roll()</code> 2. <code>Tile(RANDOM).place(6,y)</code> 3. <code>if y >= 4:</code> 4. <code>y = y - 2</code> 5. <code>Tile(PINK).place(6,y)</code> 6. <code>else:</code> 7. <code>y = y + 2</code> 8. <code>Tile(YELLOW).place(6,y)</code>
EXAMPLE R 1. <code>x = roll() * 2</code> 2. <code>if x == 12:</code> 3. <code>x = x - 1</code> 4. <code>y = roll() * 2</code> 5. <code>if y == 12:</code> 6. <code>y = y - 1</code> 7. <code>Tile(YELLOW).place(x,y)</code> 8. <code>PIN1.place(x,y)</code> 9. <code>if x > 5:</code> 10. <code>PIN1.shift(LEFT,2)</code> 11. <code>else:</code> 12. <code>PIN1.shift(RIGHT,2)</code> 13. <code>Tile(PINK).place(PIN1)</code> 14. <code>if x > 5:</code> 15. <code>PIN1.shift(LEFT,2)</code> 16. <code>else:</code> 17. <code>PIN1.shift(RIGHT,2)</code> 18. <code>Tile(RANDOM).place(PIN1)</code>	EXAMPLE S 1. <code>x = roll() + 2</code> 2. <code>y = roll() + 2</code> 3. <code>tile(PINK).place(x,y)</code> 4. <code>tile = Tile(RANDOM)</code> 5. <code>color = tile.getColor()</code> 6. <code>if color == YELLOW:</code> 7. <code>tile.place(x,y+2)</code> 8. <code>else:</code> 9. <code>tile.place(x+2,y)</code> 10. <code>tile = Tile(RANDOM)</code> 11. <code>color = tile.getColor()</code> 12. <code>if color == PINK:</code> 13. <code>tile.place(x-2,y)</code> 14. <code>else:</code> 15. <code>tile.place(x,y-2)</code>

GUtPy Coding Examples (with loops)

CODE EXAMPLE T

```
1. i = 0
2. while i < 5:
3.     print(i)
4.     i = i + 1
5. while i >= 0:
6.     print(i)
7.     i = i -1
```

CODE EXAMPLE U

```
1. i = true
2. while i == true:
3.     d = roll()
4.     if d in [1,2,3]:
5.         print(d)
6.     else:
7.         i = false
```

CODE EXAMPLE V

```
1. i = 0
2. d = roll()
3. while (d%2)==0:
4.     i = i + 1
5.     d = roll()
6. print(i,d)
```

CODE EXAMPLE W

```
1. x = roll()
2. if x == 1 or x == 2:
3.     i = 2
4. else:
5.     if x == 3 or x == 4
6.         i = 4
7.     else
8.         i = 6
9. while i > 0:
10.    x = roll()
11.    print(i,x)
12.    i = i - 1
```

CODE EXAMPLE X

```
1. i = 0
2. a = 0
3. b = 0
4. while i < 5:
5.     d = roll()
6.     if not((d%2)==0):
7.         a = a + 1
8.     else:
9.         b = b + 1
10.    i = i + 1
11.    print(i,a,b)
```