

1 Exécution d'une séquence d'instructions

```
0 0 0 : 1 0 0 0 0 0 0 0
0 0 1 : 0 1 0 0 0 0 0 0
0 1 0 : 0 0 1 0 0 0 0 0
0 1 1 : 0 0 0 1 0 0 0 0
1 0 0 : 0 0 0 0 1 0 0 0
1 0 1 : 0 0 0 0 0 1 0 0
1 1 0 : 0 0 0 0 0 0 1 0
1 1 1 : 0 0 0 0 0 0 0 1
```

2 Pavage de triangles équilatéraux

```
1 # -*- coding: utf-8 -*-
2
3 from turtle import *
4
5 n = 5
6 a = 50
7 x,y = 0,0
8 dx = 25
9 dy = -25
10 for j in range(n):
11     up()
12     x = x + dx
13     y = y + dy
14     goto(x,y)
15     down()
16     for i in range(3) :
17         forward(a)
18         left(120)
```

3 Nombres fractionnaires

```
1 # -*- coding: utf-8 -*-
2
3 x = 0.2578125
4 k = 60
5 print(x, ' = 0.', end=' ')
6 while x != 0 and k > 0:
7     x = x*2
8     print(int(x), end=' ')
9     x = x - int(x)
10    k = k - 1
```

4 Méthode des rectangles

```
1 # -*- coding: utf-8 -*-
2
3 from math import *
4
5 f = sin
6 a = 0.
```

```
7  b = pi
8  n = 100000
9  I = 0.0
10 largeur = (b-a)/n
11 x = a + largeur/2
12 while x < b:
13     I = I + f(x)
14     x = x + largeur
15 I = I*largeur
16
17 print(I-2)
```
