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# ensemble_de_Mandelbrot.py

01| import numpy as np
02| import matplotlib.pyplot as plt
03|
04| n = 200
05| nb_iteration = 100
06|
07| Lx = np.linspace(-2, 2, n)
08| Ly = np.linspace(-2, 2, n)
09|
10| def appartient(c):
11|     z = 0
12|     seuil = 2 + abs(c)
13|     for _ in range(nb_iteration):
14|         if abs(z) > seuil:
15|             return False
16|         z = z**2 + c
17|     return True
18|
19|
20| M = np.array([[appartient(x + y*1j) for x in Lx] for y in Ly])
21| plt.imshow(M)
22| plt.show()
23|
24|
```