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# -*- coding: utf-8 -*-
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import numpy
import random
import math
from matplotlib.pyplot import *
import ising2D
```

```
'''On execute la fonction et on plot la valeur de m en fonction de l'iteration'''
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```
N = 30
ising = isingchamp.Ising2D(N)
ising.temperature(2.3,0)
(m,M,dM)=ising.boucle(1000)
figure(figsize=(10,6))
plot(m,'r')
xlabel('iteration')
ylabel('M')
axis([0,1000,-1,1])
grid()
```

```
'''on affiche le reseau de spin'''
figure(figsize=(6,6))
matshow(ising.couche(0))
```