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scratch_1.py
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import numpy as np

if __name__ == "__main__":
    A = np.matrix([[1, 0, -1, 0], [0, 1, 0, -1], [0, 1, 2, 1], [0, 0, 0, 2]])

print(A)

B = np.identity(4) - A

for i in range(1, 3):
    C = (2 * np.identity(4)) - A

for k in range(1, 3):
    print((i, k))
    print(B * C, end="\n\n")
    C = C * C

B = B * B
```