```
import numpy as np
import numpy.linalg as alg
from numpy.polynomial import Polynomial
import matplotlib.pyplot as plt

def A(n):
    return np.array([[1/(i+j+1) for j in range(n)] for i in
range(n)])
def B(n):
    X = np.zeros(n)
    X[0] = 1
    return X
def Poly(n):
    return Polynomial(alg.solve(A(n+1), B(n+1)))

abscisse = np.linspace(0, 1, 101)

def graphique(n):
    plt.plot(abscisse, Poly(n)(abscisse))

for k in range(6):
    graphique(k)
```