1 Included Listing

This is actual code.

```
import numpy as np

def DFT(x):
    n = np.arange(x.shape[-1])  # time indexes
    N = x.shape[-1]  # signal length
    X = np.zeros(N, dtype=complex)
    for k in range(N):
        X[k] = np.sum(x*np.exp(-1j*2*np.pi*k*n/N))
    return X
```

Listing 1: Function to compute the Discrete Fourier Transform of a signal.