# -\*- coding: utf-8 -\*-

"""

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Note! : Please read comments!!!

"""

import numpy as np

from scipy.fftpack import rfft

#Below function is for l1 of length 50.

#I donot understand the relation between length of l1 and n. (Order of fft)

def spectral\_energy(l1):

n = 16 #Assuming Window size of 50

Y = rfft(l1,n)

P = abs(Y/n)

P = P[1 : ( (n//2)+1 )] # double // to get integer equivalent.

energy = np.sum(np.power(P,2))

return energy