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1 '''
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5 '''
6
7 #importing necessary functions from libraries
8 from numpy import linspace
9 from numpy.fft import fftfreq
10
11
12 #message signal parameteres
13 amp_vm = 20
14 amp_vc = 50
15 fc = 800
16
17 #these are sampling values
18 fs = 30*fc
19 dt= 1/fs
20 duration = 1
21 N = duration * fs
22
23 #generating time axis samples
24 time = linspace(0, duration, N)
25
26 #message and carrier singal variables need to be calculated in the main file
27 vm = 0
28 vc = 0
29 vask = 0
30
31 #spectrum variables needs to be calculated in the main file
32 spectrum = 0
33
34 #generating frequency axis samples
35 frequency = fftfreq(len(time), dt)
36 print(len(frequency))
37
38
39
```