This question is challenging, I encounter lots of questions and almost cost 2 days to solve it.

When I used f = [float(440\*2\*\*float(i/12) for i in range(13)), f stayed in 440 and 880 only. Then I used print to test the result of the f, it showed that I must have place float in a wrong place. Then I asked TA for help, he told me f = [float(440\*2\*\*(float(i)/12)) for i in range(k)], since i is an integer, 12 is also an integer, so the result was aliquot. So I need to place the float on i.

What’s more, overlapping confused me for a long time, it should be the sum of all the voice of key. I needed a matrix to save the coefficients of each output signal. But I didn’t know how to use matrix, so I set array instead of it. I initialized the coefficients at beginning and called the value in the loop. Making impulses for each input. Then I got a well working program.