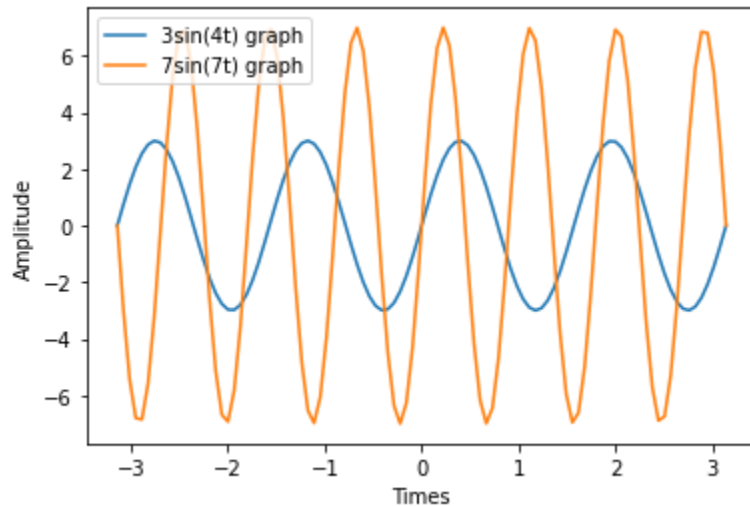
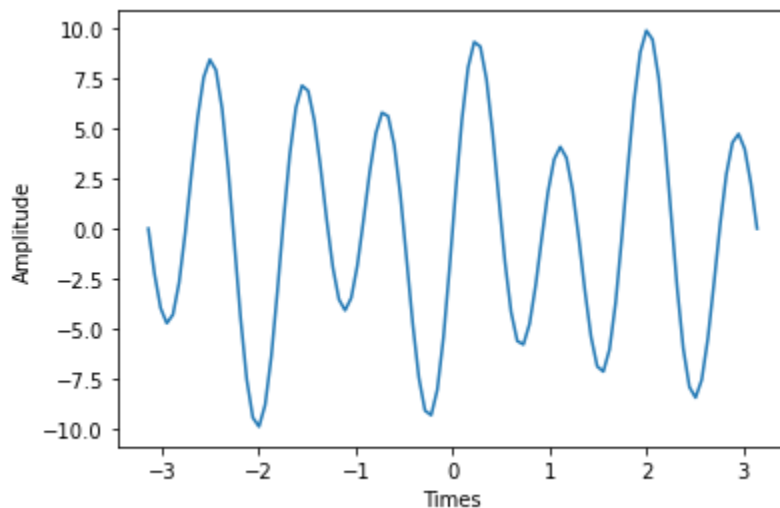


## Assignment report:

- I have initially taken 2 sinusoidal signals of 4Hz and 7Hz frequency:

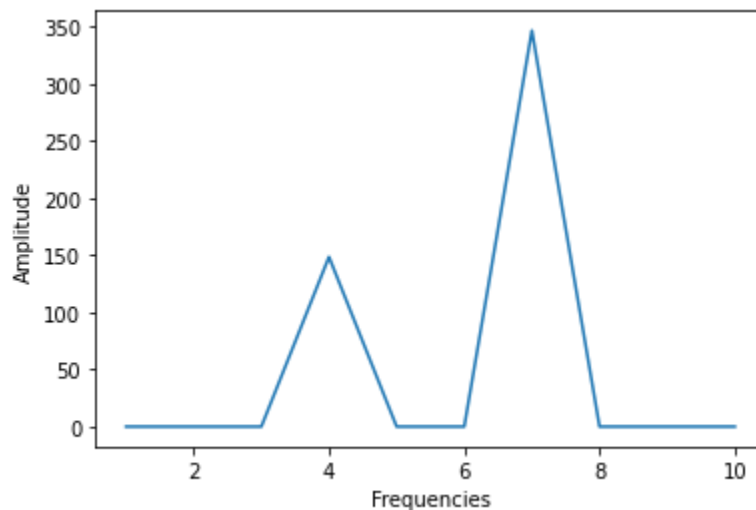


- This is the plot I got after adding both the sinusoids:



- This is the final graph of frequency vs amplitude after multiplying the above sinusoid of all times

with a sinusoid that takes every value of frequency:



- From the above graph, I observed that the amplitude response is significant for the frequencies 4Hz and 7Hz, this is because, we took the input signal as a combination of sinusoids having 4Hz and 7Hz frequencies and by multiplying with a sinusoid of a particular frequency, we get the amplitude response of the signal at a particular frequency.