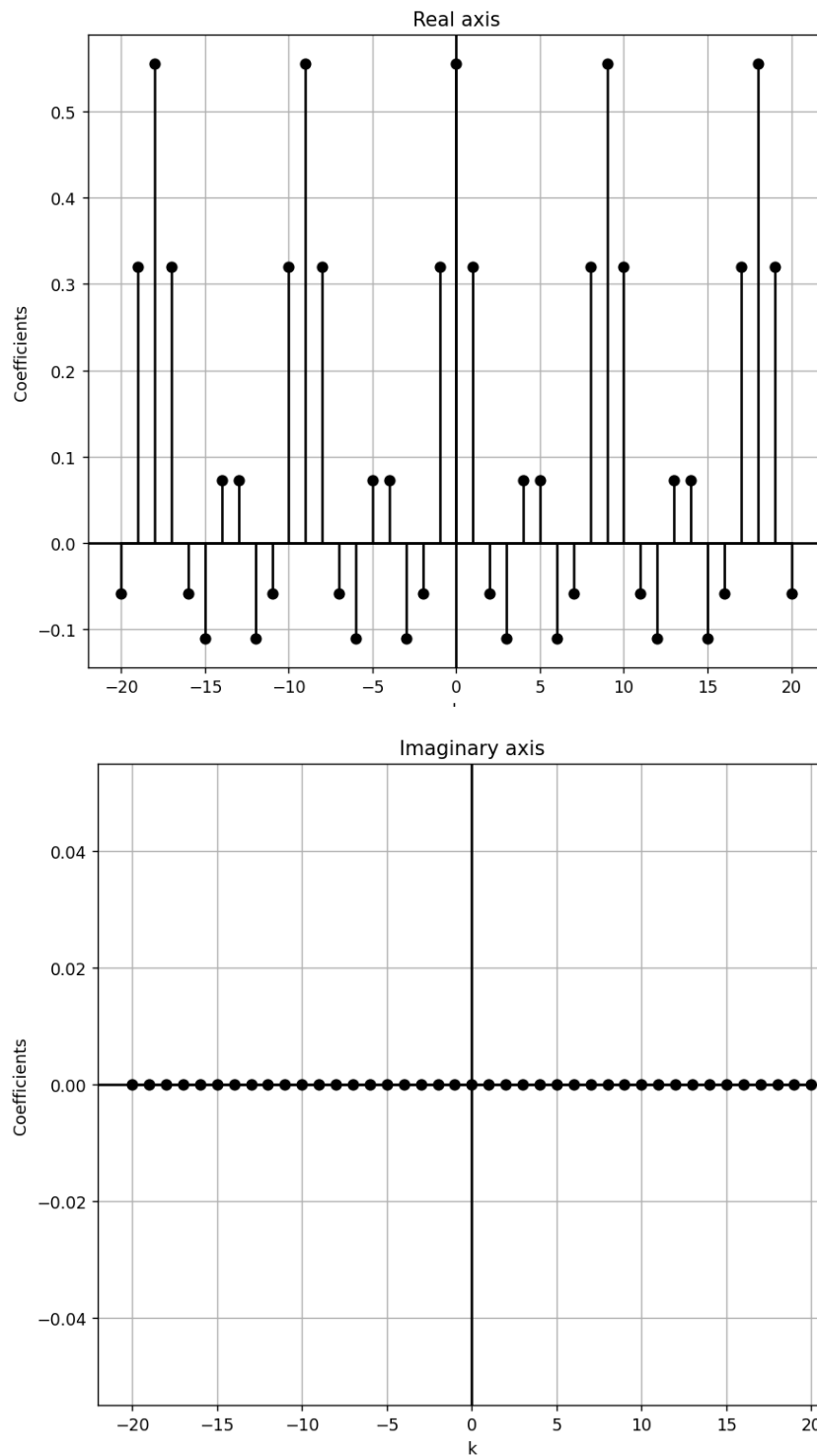


Assignment 3 - Coding Outputs

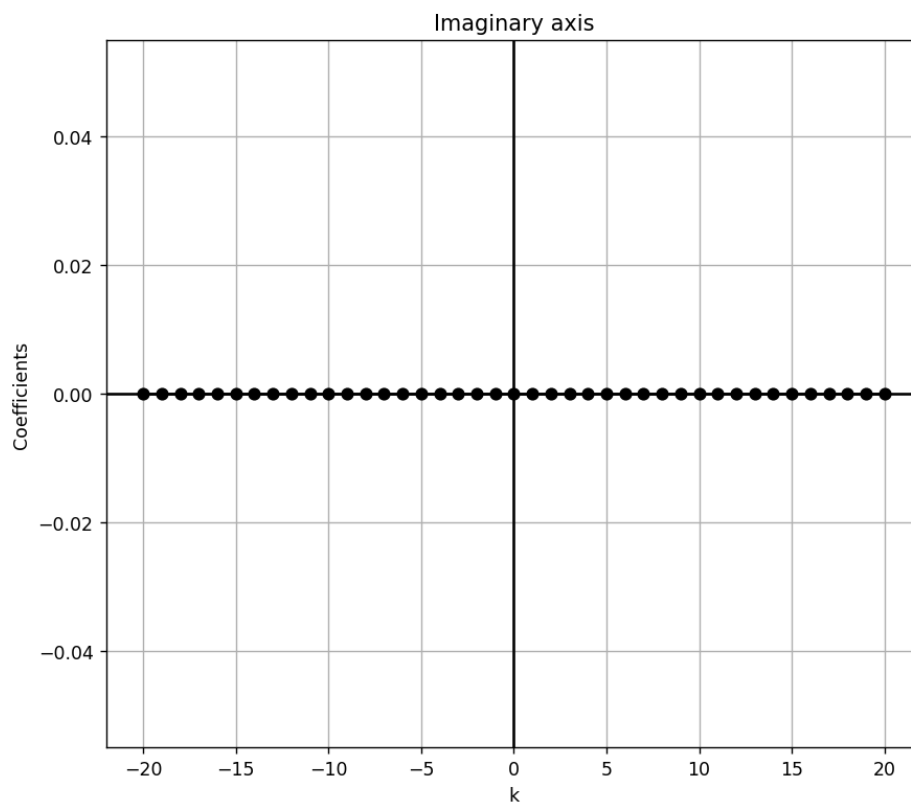
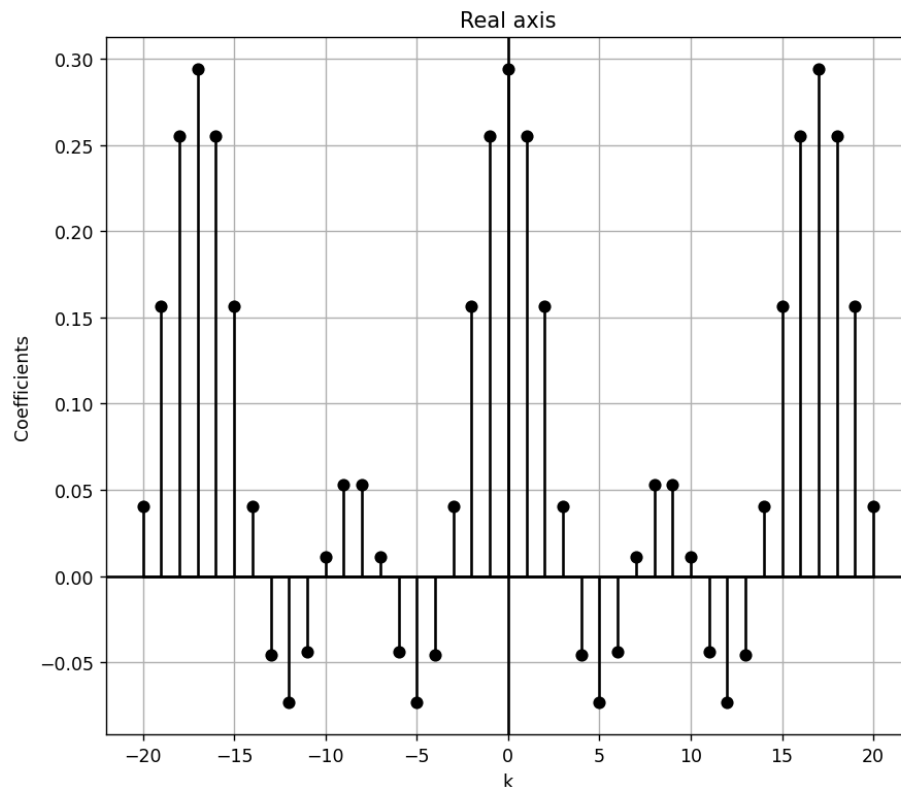
Aditya Aggarwal – 2022028 – CSAI

Answer 1

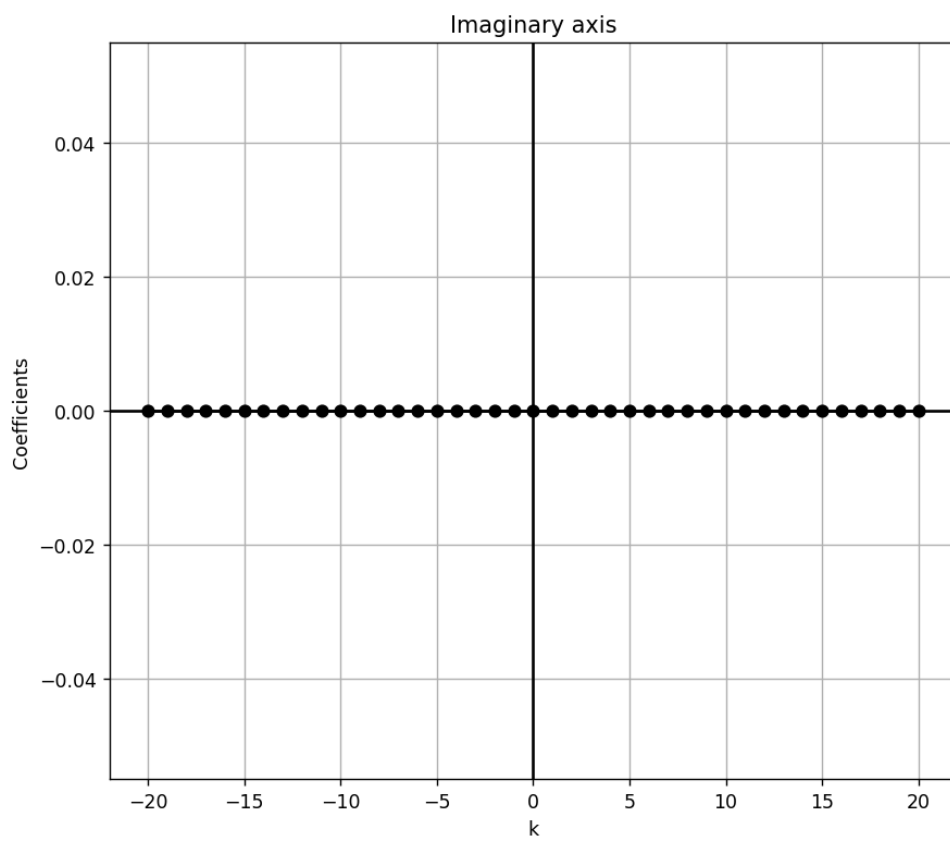
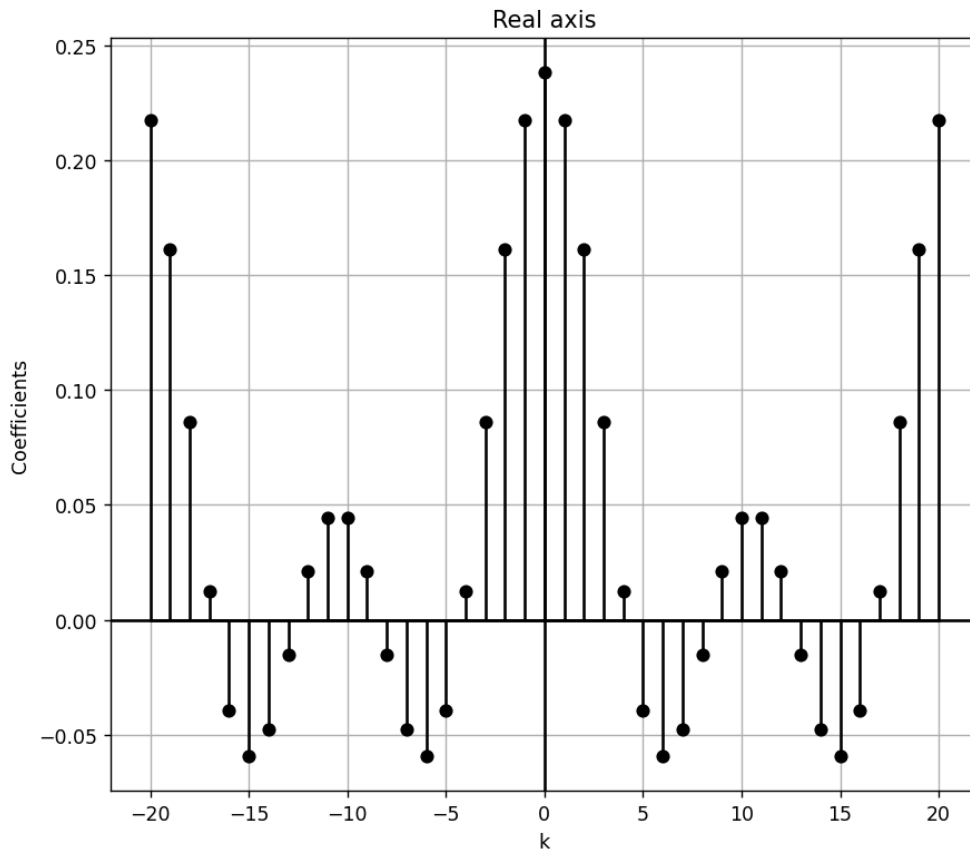
Case – I : $N = 4N_1 + 1$



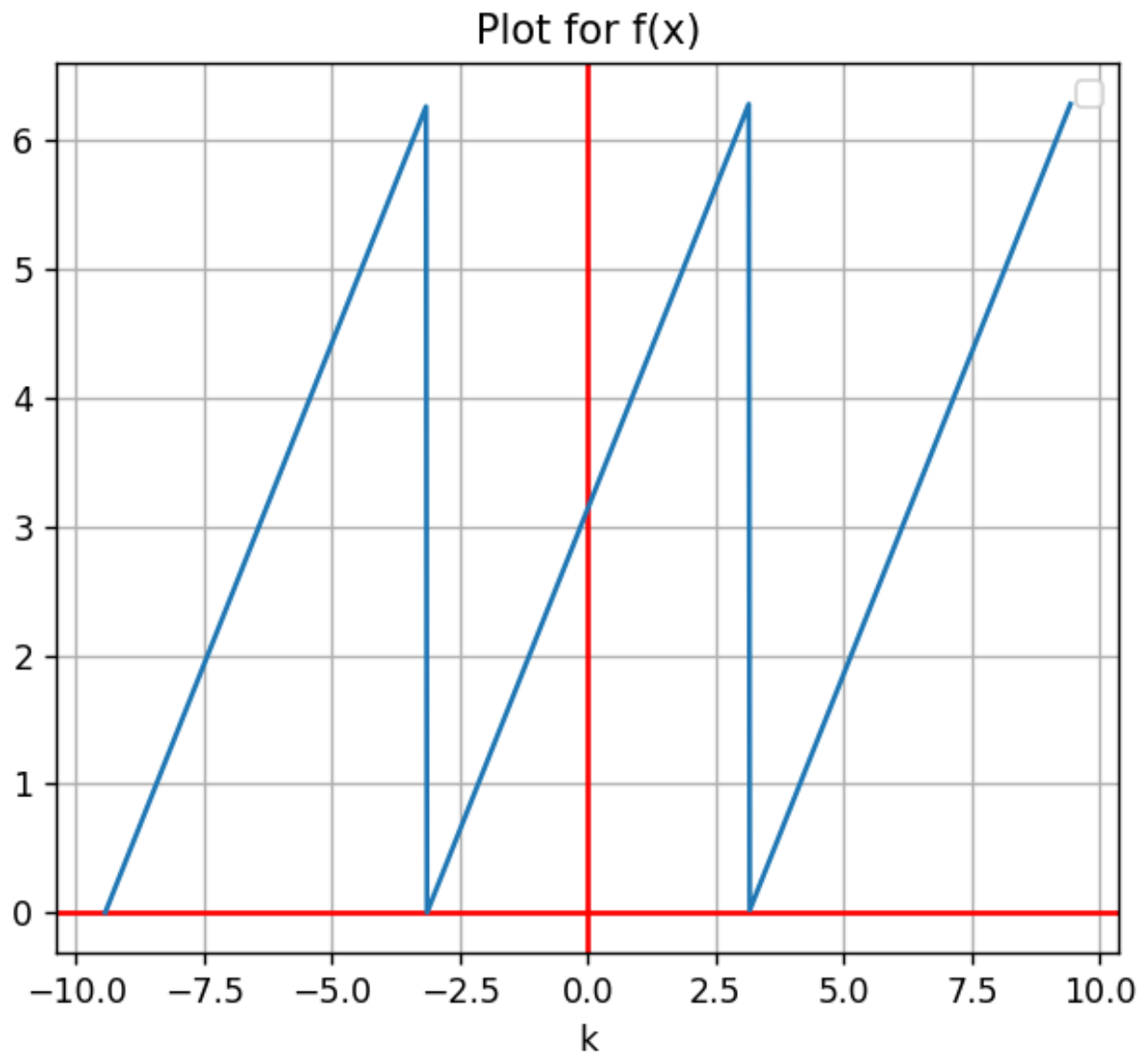
Case – II : $N = 8N_1 + 1$



Case – III : $N = 10N_1 + 1$



Answer 2

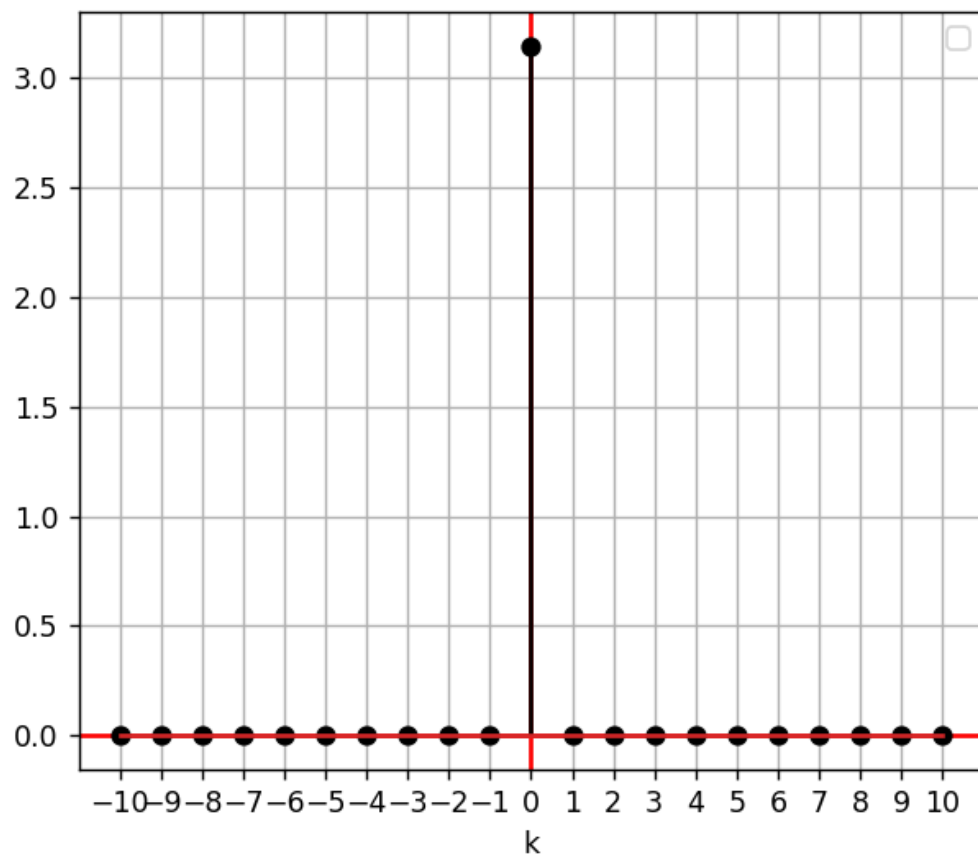


The range for plotting $f(x)$ is from -3π to 3π , which is equal to 3 time periods.

The range for plotting the coefficients is from -10 to 10, which is an approximate discretization the same as the range of the plot for $f(x)$

(Rest of the calculations and assumptions are mentioned in the Report)

Fourier Series on Real axis



Fourier Series on Imaginary axis

