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MUSI6202 Assignment 2

Generating a Sinusoid

First we wrote a function which generates a sinusoid given input parameters of amplitude, sampling rate, frequency, length and phase. The plot of the first 5ms of a 400hz sine wave with a 44100Hz sampling frequency and a phase shift of half pi is shown below.

A screenshot of a cell phone

Description automatically generated

Generating a Square Wave

We then wrote a function generateSquare() that generates a square wave given input parameters of amplitude, sampling rate, frequency, length and phase. The plot of the first 5ms of a 400hz sine wave with a 44100Hz sampling frequency and a phase shift of zero is shown below. This has been overlaid over the plot of the previous section

A close up of a map

Description automatically generated