MATH 464, Extra HW 3

1) Implement in your preferred Computer Algebra System (MATLAB, MATHE-MATICA, MAPLE, DERIVE, OCTAVE, etc etc) the COSINE transform of type I for $N = 2^5$. Apply it to a vector:

$$f(k) = \sin(2\pi k/32), \quad k = 0, \ldots 31.$$

2) Compare the results of part 1 with the result of the FFT applied to the same vector.