AYALA Laurein Abigail

BALUYOT Winchester

PROBLEM 5: For n = 0:199, given the user-input 𝑥(𝑛), determine 𝑦(𝑛) if 𝑦(𝑛) = { −1.5𝑥(𝑛) + 2𝑥(𝑛 + 1) − 0.5𝑥(𝑛 + 2), 𝑛 = 0 0.5𝑥(𝑛 + 1) − 0.5𝑥(𝑛 − 1), 0 < 𝑛 < 198 1.5𝑥(𝑛) − 2𝑥(𝑛 − 1) + 0.5𝑥(𝑛 − 2), 𝑛 = 199 Test your program for 𝑥(𝑛) = sin ( 3𝜋 100 𝑛) Superimpose the graphs of 𝑥(𝑛) and of 𝑦(𝑛) with different line colors in one figure window. Do not forget to put legends.

