**Lab 1：Introduction**

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| **Introduction**  In this lab, matlab is used to test different systems by creating different input and comparing the output to get properties of the systems. Also matlab is used to write function which implements the first-order autoregression equation  **Lab results & Analysis**：  Part 1.4                                        Part 1.5   1. function y = diffeqn(a,x,ynl)      1. xl[n] = 6[n] x2[n] = u[n]        1. xl[n]=u[n]   x2[n]=2u[n]  2y1[n]-y2[n]because y1 with multiple 2 that made one more -1 in the result.   1. y[-1] = 0 y[-1] = 0.5     as you can see output signal is different in the beginning value and increase speed. Also they have the same final value  **Note**: Please indicate meaning of the symbols in all expressions. Please indicate the coordinate and unit in all figures. | |
| **Experience**  Tang finishes the part 1(1.4) Bi finishes the part 2(1.5)  Both finish their own part of this report. | |
| **Score** |  |