Three tank system

**Authors**

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# Linearization for the single-tank system

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| **The linearized single tank system is given as** |

**To obtain the linearized single tank system, we started from ….**

***Detailed derivation***

# Controller design for the three-tank system

## State-feedback with given poles

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| **The feedback gain and closed-loop dynamics are given as** |

***Add graphs of simulation results from matlab and explain***

***Add graphs of experiment results from remotelabs and explain what you observe***

## The LQR controller with given weight matrix

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| **The feedback gain and closed-loop dynamics are given as** |

***Add graphs of simulation results from matlab and explain***

***Add graphs of experiment results from remote-labs and explain what you observe***