Notes for lecture 12

1. Date: June 27th. This lecture is based on Sections 7.5 of the main textbook.
2. Section 7.5 (see Chapter7.5.pdf and Lecture12.pdf) consider solutions of homogeneous (with zero right hand side) systems of linear differential equations. The key point is as follows.
    a. The section considers the case when the roots are real and distinct (they may be repeated but the matrix must be diagonalizable, that is it must possess the full set of eigenvectors).
    b. Notion of phase portrait of two-dimensional systems is actively exploited in this chapter.
3. It is highly recommended to refresh your knowledge of Linear Algebra. For your reference, supplemental material (BrushUp_Chapter 7.2-7.3, and BrushUp_LA.pdf file) is included.
4. The deadline for submitting homework, Assignment 12 (refer to Assignment12.pdf) is July 4th, 13:00. Solutions to this assignment (refer to Assignment12_sol.pdf) will be uploaded to Resource Section on July 6th after the class.