# ISEC 400 Homework 1

Answer the following questions based on your reading of the text book, any supplemental material, and the instructor’s presentation this week. If you use an external source (i.e. a web-page, the required textbook, or an additional book) to help you answer the questions then be sure to cite that source. Hint: you should probably always be citing a source.

## Questions

1. [5 points] Compare and contrast access control lists versus capability lists. In a software implementation of an authorization mechanism in a web-based application, which would you prefer to implement and why?
2. [5 points] Compare and contrast the Bell-LaPadula and Biba security models. What are the goals of each? How could each be implemented in a software system?
3. [5 points] Compare and contrast MAC, DAC, and RBAC authorization models. Are these related to Bell-LaPadula and Biba? If so, how? If not, then why not? Describe at least one situation where MAC, DAC, and RBAC are most appropriately implemented.
4. [5 points] Do some research into *why* industry, academia, and government think that software is insecure. Provide at least three cited reasons and justifications for their opinion. Do you agree? Why or why not?

## Submission instructions

Create a Word document with your solution to the short answer questions. Submit both the Word document to the dropbox for the course.