**Reading Assignment 9 – Chapter 7 Questions**

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Instructions:

* Read pages 235-270 of your text.
* Type answers to the questions below (don’t remove questions).
* Submit work on BlazeView.
1. What is the idea of the Adapter pattern? Briefly describe in your own words.
2. A common problem in industry is you have a system coded against a vendor’s classes. Then, you change vendors, or the vendor changes the interface. How is the Adapter pattern useful?
3. (Omit) What is middleware? How is middleware related to the Adapter pattern? Do an internet search and briefly describe what you find.
4. What is a two-way adapter? Describe a situation where it is needed?
5. How does the adapter decouple the client from implemented interface?
6. Consider the Adapter pattern UML on page 243. Which design principles does this adhere to? How?
7. What is the difference between an object adapter and a class adapter?
8. (Omit)How could you simulate multiple inheritance in Java?
9. (Omit) In the example about adapting the Enumerator class, how did they deal with the *remove* method?
10. (Omit) Briefly describe the Decorator, Adapter, and Façade classes as succinctly as possible.
11. On page 260, the text says that the façade doesn’t encapsulate the subsystem, low-level access is still available. Can you thing of situations where you might actually want the façade to encapsulate the subsystem? Explain.
12. (Omit)Describe a situation where you might have multiple facades for a given subsystem
13. How does the façade pattern allow you to decouple your client code from a particular subsystem?
14. What is the *intent* of the adapter and façade patterns?
15. (Omit) Describe the Principle of Least Knowledge.
16. How does the example on page 266 violate the principle of least knowledge?