ECE 417/617 Assignment #4

Read Chapters 3-4 of Steve McConnell, *Code Complete*, 2nd edition, Microsoft Press, 2004.

Then answer the following questions.

Chapter 3: Prerequisites

13. What is the danger of giving in to the urge to program right away? What else should be done first?

14. Purging an error near the beginning of construction is how much less expensive than fixing it later?

15. Approximately 50% of the total time in a typical project is spent doing what?

16. In terms of how they are organized, most projects are neither completely

 _____ nor completely _____.

17. List three necessary prerequisites before beginning construction:

 _____, _____, and _____.

18. What is internationalization / localization?

19. What is the most popular software engineering book ever?

20. The essential problem with large systems is maintaining their

 _____ _____.

21. How much time should typically be spent on upstream prerequisites?

Chapter 4: Key decisions

22. How much more expressive is Python compared with C? Which results in greater productivity: switching from C to C++, or switching from C++ to Python?

23. What hypothesis says that your choice of programming language not only affects how to express your thoughts but also determines what thoughts you can express (i.e., it affects both your syntax and semantics)?

24. What are the two most popular programming languages?

25. The author tells a story of his adopting some simple conventions to give his Visual Basic code more structure, thereby keeping the project manageable. What is this called?

26. In the above-mentioned project, what three aspects did the author keep separate?