Review Questions for Reading #3

1. What is a ***loop invariant*** for a `while` loop?

2. Why is it important that you play close attention (and be careful) when reading the computing literature concerning “loop invariants”?

3. What are loop invariants used for — and why is it important for them to be reasonably complete?

4. Briefly describe a process that you can follow to establish that a given assertion is a loop invariant for a given `while` loop in an algorithm.

5. What does it mean for an algorithm (for a given computational problem) to be ***partially correct***?

6. How are ***partial correctness*** of an algorithm and ***correctness*** of an algorithm related?