

Name _____

Student number _____

SE 2AA4 Winter 2007

Quiz 5 Answer Key

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You have 10 minutes to complete this quiz consisting of 2 pages and 5 questions. You may *not* use your notes and textbooks, nor may you use any calculators or other electronic devices. Circle the *best* answer for the multiple choice questions, and write the answer in the space provided for the other questions. Good luck!

(1) [4 pts.] Donald Knuth is

- (a) A winner of the Turing Award.
- (b) The inventor of the TeX typesetting system.
- (c) The author of *The Art of Computer Programming*.
- (d) All of the above.

(2) [4 pts.] Javadoc generates Java documentation presented as a set of

- (a) Microsoft Word files.
- (b) PDF files.
- (c) HTML files.
- (d) Text files.

(3) [4 pts.] Which of the modules from the stack data structure example is a definitional extension?

- (a) `StackAsArray.c`, `Stack.h`.
- (b) `StackAsLinkedList.c`, `Stack.h`.
- (c) `StackPlus.c`, `StackPlus.h`.
- (d) `StackTestProcedures.c`, `StackTestProcedures.h`.

(4) [4 pts.] What is a *data type*?

Answer: A data type is a set of data (usually with a common structure) and a set of operations that can be performed on the data.

(5) [4 pts.] Suppose a class named `Range` has the following two fields:

```
private float start;  
private float end;
```

Write a constructor for this class that (1) takes a value x of type `float` as input and initializes the two fields of `Range` to x and (2) is accessible outside of the class.

Answer:

```
public Range(float x) {  
    start = x;  
    end = x;  
}
```