

CS 106A Midterm Exam – Answer Booklet

This is an closed-textbook, closed-note exam. You may not use any printed paper resources or computing devices of any kind, including calculators, laptops, cell phones, or other devices.

Unless otherwise indicated, you will be graded on functionality only – but good style helps graders understand what you were attempting. **Remember that you must write the solution to a problem in that problem's provided answer pages in this booklet. Answers to a problem outside of its designated answer pages in this booklet, or written in the question booklet, will receive no credit.** You do not need to write any import statements. Unless otherwise specified, you may write helper methods to implement required behavior if you like. Do not abbreviate code; you must write out all code that is part of your answer. If you want to utilize code found in the textbooks, you may cite the page number and code sample without rewriting that code. Pay attention to whether a question requires you to write a complete Java program, or just individual methods.

You have 2 hours to complete this exam.

First Name: _____

Last Name: _____

SUNET ID (e.g. jdoe) _____

I accept the letter and spirit of the Honor Code. I have never given nor received any unpermitted aid on this exam, and promise to address/report anyone who fails to follow the Honor Code.

(sign here) _____

- | | |
|---|-------------|
| 1) Karel the Robot..... | [25 points] |
| 2) Java Statements and Expressions..... | [20 points] |
| 3) Console Programs..... | [40 points] |
| 4) Graphics Programs..... | [35 points] |
| Total: 120 points | |

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Problem 1

```
// don't worry about importing packages  
  
public class StrikerKarel extends SuperKarel {
```


Problem 2(a)

i. _____

ii. _____

iii. _____

iv. _____

v. _____

Problem 2(b)

i. _____

ii. _____

iii. _____

iv. _____

v. _____

Problem 3a

```
// don't worry about importing packages

private boolean testOneClue(String clue, String answer, double
    revealChance) {
```

Problem 3b

```
// don't worry about importing packages

public class MyCrosswordTrainer extends ConsoleProgram {
    private static final String FILENAME = "crossword.txt";

    public void run() {

        }

    }
}
```


Problem 4a

```
// don't worry about importing packages

public class PollsterPanic extends GraphicsProgram {

    private static final int N_ROWS = 3;
    private static final int N_COLS = 5;

    private static final int ZONE_WIDTH = 120;
    private static final int ZONE_HEIGHT = 150;

    // instance variables, if needed, go here


    public void run() {


    }

}
```


Problem 4b

// TODO: write a method that responds to the event described in
Part A