

CSI2101-2009 - ASSIGNMENT#2

NAME: _____

STUDENT ID: _____ TOTAL MARK: _____

Due date: Thursday February 12 at 12:30 (up to max 24hs late with 10% off)

Hand in method: drop into the assignment drop box for this course at SITE 1st floor.

Instructions:

- Your document should have exercises from Section 1. followed by Section 2.
- Include this page as a cover page, as marks will be recorded here.
- Fill out your name and student number in all pages
- Circle below the exercise numbers that have been submitted.

Each Section is worth 50 marks, but you have a choice of exercises to solve within each section (see mark rules below).

Your focus should be to solve your first choice of questions carefully. Then, do as many extra questions as you can in order to have good practice, to receive feedback for the midterm and to increase your chance of having a higher overall mark.

1. INFERENCE RULES AND PROOF METHODS (MAXIMUM 50 POINTS)

You may solve questions adding to 50 points or more.

You will receive feedback and be marked on all exercises solved.

You will receive marks on the best n questions whose values adds up to 50.

- (1) (10 marks) Sect 1.5 page 73 exercise 16
- (2) (5 marks) Sect 1.5 page 74 exercise 30
- (3) (10 marks) Sect 1.6 page 85 exercise 18
- (4) (5 marks) Sect 1.6 page 85 exercise 24
- (5) (10 marks) Sect 1.6 page 85 exercise 26
- (6) (5 marks) Sect 1.7 page 103 exercise 12
- (7) (10 marks) Sect 1.7 page 103 exercise 22
- (8) (10 marks) Sect 1.7 page 103 exercise 32
- (9) (5 marks) Sect 1.7 page 103 exercise 40

2. INDUCTION AND STRONG INDUCTION (MAXIMUM 50 POINTS)

You may solve 2 questions or more. You will receive feedback and be marked on all exercises solved. You will receive marks on your best 2 questions below.

- (10) A) (12.5 marks) Sect 4.1 page 280 exercise 18 (induction)
B) (12.5 marks) Sect 4.1 page 282 exercise 56 (induction)
- (11) (25 marks) Sect 4.2 page 292 exercise 8 (strong induction)
- (12) (25 marks) Sect 4.2 page 292 exercise 12 (strong induction)
- (13) (25 marks) Sect 4.1 page 282 exercise 66 (induction)