

CS 4501/6501: In-class 10

Logic Coverage Criteria

26-Oct-2017

Names:

Purpose: Understand the basic concept of logic coverage criteria (predicate coverage, clause coverage, combinatorial coverage, determination)

Instruction: Work with your neighbors in groups. Consider the following predicates and answer the questions

- (1) $p = ab$
- (2) $p = a + (bc)$
- (3) $p = !a!b + a!c + !ac$
- (4) $p = a \rightarrow (b \rightarrow c)$

1. List test requirements that satisfy predicate coverage (PC)

2. List test requirements that satisfy clause coverage (CC)

3. Compute (and simplify) the conditions under which each clause determines predicate p

4. Write the complete truth table for the predicate. Include columns for the conditions under which each clause determines the predicate, and also a column for the value of the predicate itself