

General Feedback for

CS3470 Assessed Coursework 2

How and when feedback was provided

Individual provisional feedback marks and copies of marked scripts were returned to students during the lecture on 20th November. Solutions were discussed in lectures as documented in the lecture diary which is on the course website.

General feedback

Most students made a serious attempt at this assignment. The average mark was 63%, there were 4 students who got a mark of over 80%. I am pleased that all students are attempting the coursework, this will help a lot when it comes to the examination. However, it is clear that some students are not working through the examples covered in class and several did not attempt the last two questions.

Question 1. Most students were able to give correct leftmost and rightmost derivations. Some students lost marks because they did not show that the grammar was ambiguous by showing two leftmost (or two rightmost) derivations.

Question 2. Most students did the first part well. Some students did not continue to substitute for left-most instances of rewritten nonterminals in later rules, and some students incorrectly applied the immediate left recursion removal before doing the substitution of nonterminals already processed. Many students did not run the algorithm through to the end. The algorithm will perform the substitutions in later rules even if they are not left recursive. It is important to execute the algorithm exactly, not interpret it for special cases.

Question 3. In the FIRST set computations several students did not correctly handle the case where a nonterminal can derive ϵ . Some students did not include $\$$ in the FOLLOW set of S and several had not understood the computation method properly. It is important to work through examples covered in class.

Question 4. Most students did the first part of this question well, although several forgot to compute the first sets as required by the first part of the question. Some students did not follow the rules for constructing an rd parser faithfully, which will also make it harder for them to do GLL parser construction correctly, and most students did not give the derivation tree that would have been produced by their parser.

Question 5. Most students struggled with this question, often not passing the running total down through the parse function correctly. Several students changed the grammar which is not what the question asked for. There is similar example worked through in Lab Sheet 1.

Marks histogram

