COMP 3240

Programming Assignment 1 Argument Form Validity Checking

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Synopsis

The goal of this assignment set is for you to apply your understanding of argument form validity checks to automate them by implementing code to accomplish this. These are individual assignments and plagiarism will not be tolerated. You must write your code in either Java or Python 3 using the template provided.

Problem statement

Write a Java or Python 3 program to automate checking validity of argument forms. To avoid the complexity of parsing arbitrary argument forms, we have included a parser and evaluator for you to use. Your code should be able to handle a varied selection of negations, conjunctions, disjunctions, and conditionals. Do not hardcode the truth tables, as your code should be able to handle any number of variables.

We are giving you an additional file (Evaluator.java or Evaluator.py) to help you evaluate the argument forms. More about how to use this file is included in the template files. It is not necessary to upload this file to Gradescope.

Resubmissions, penalties, documents, and bonuses

If you submit before the deadline, then you may resubmit up to a reasonable number of times till the deadline but not thereafter, your last on time submission will be graded. If you do not submit before the deadline, then your first late submission will be graded.

The penalty for late submission is a 5% deduction for the first 24 hour period and a 10% deduction for every additional 24 hour period. So 1 hour late and 23 hours late both result in a 5% deduction. 25 hours late results in a 15% deduction, etc. Not following submission guidelines can be penalized for up to 5%, which may be in addition to regular deduction due to not following the assignment guidelines.

Some assignments may offer bonus points for extra work, but note that the max grade for the average of all assignments is capped at 100%.

Deliverables & Due Date

The deliverables of this assignment are:

1. your source code with appropriate comments in a single file with at the top your name and the string "COMP 3240 Section xxx Programming Assignment 1"

The due date for this assignment is 10:00 PM on February 3, 2023.

Grading

The maximum number of regular points you can get is 100. The point distribution is as follows:

Algorithmic	80
Good programming practices including code reliability and commenting	20