Assignment #2

Due: Friday 26th of October, 2018 before 11:55 pm

Note:

1. Late submissions receive zero credit.
2. If you write only the correct answer without steps you get very low credit.
3. Submit in hard form.
4. Do not knock at the door. Just slide beneath the door.
5. Copied code from internet receive a 0.
6. If I found two students code the same, then I will give 0 to both. The claim that "he copied from me" will not be entertained. It is your assignment and your responsibility to make it secret from others.
7. Make sure you follow programming conventions, i.e., indentation, comments, suitable variable names.

In this programming assignment you will implement the resolution principle for proving an argument.

Remember that there are two steps.

In step 1, we construct the clauses corresponding to the premises and

In step 2, we apply the rule of resolution repeatedly to prove or disprove an argument.

Write code for implementing the two steps of the principle of resolution. You may write the code in any programming language that you like. You code should accept the argument (in the form of premises and conclusion) as an input in the form of one big string. Each premise will end with a period or '.'. You need to show me two things

1. The clauses corresponding to the premises. Please note that the final clauses corresponding to the conclusion must be obtained after taking the negation.
2. The stepwise application of the rules of inferences. Each step should mention the clauses that are being joint together.

Deliverables:

1. Submit your code and mention the programming language on top of the code.
2. Run your code on the examples 6, 7, 8, 9 on page 62 – 63 (7th edition of the course book) and show me for each example the following.
    a. The sample output for step 1 (screen shot of the output illustrating step1).
    b. The same output for step 2 (screen shot of the output illustrating step 2.)

Adjust your screen shot so that both the steps for an example are shown on one single page.

Good Luck