Template of
CSE 579 Project Milestone 2 --
Solutions to Basic Clingo Problems

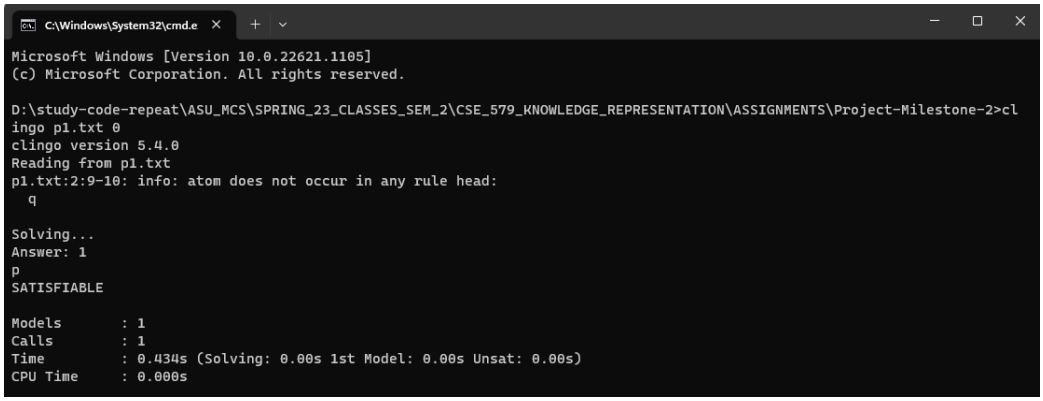
This template only records your clingo programs, command lines, and outputs of the 3 ASP programs given below. The Multi-Choice Single-Correct questions need to be answered directly in the graded assignment “Course Project: Milestone 2 -- Solutions to Basic Clingo Problems” in Coursera.

Problem 1

Consider the ASP program below from Unit 3 Module 2.[U3-M2 lecture slide].

```
p
r <- p ^ q
```

Find all the stable models of this program using clingo and fill in the following table. When writing down the command line, assume the clingo program is saved in file “p1.txt”.
(Note: Your command line may be different depending on your OS. You may truncate your output if it’s too long but make sure you don’t remove a part if it can support your answers to the Multi-Choice Single-Correct questions in the end)

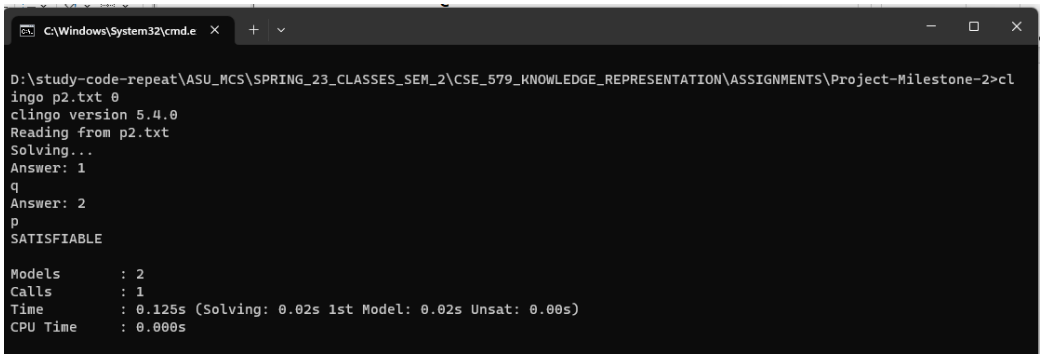
Input Program	p. r :- p, q.
Command Line	clingo p1.txt 0
Output (truncated)	

Problem 2

Consider the ASP program below from Unit 3 Module 6. .[U3-M6 lecture slide].

p <- ¬q
q <- ¬p

Find all the stable models of this program using clingo and fill in the following table. When writing down the command line, assume the clingo program is saved in file “p2.txt”.
(Note: Your command line may be different depending on your OS. You may truncate your output if it’s too long but make sure you don’t remove a part if it can support your answers to the Multi-Choice Single-Correct questions in the end)

Input Program	p :- not q. q :- not p.
Command Line	clingo p2 clingo p1.txt 0.txt 0
Output (truncated)	

Problem 3

Consider the ASP program below consisting of rules from Unit 3 Module 7. .[U3-M7 lecture slide].

p <- ¬p
p v q

Find all the stable models of this program using clingo and fill in the following table. When writing down the command line, assume the clingo program is saved in file “p3.txt”.
(Note: Your command line may be different depending on your OS. You may truncate your output if it’s too long but make sure you don’t remove a part if it can support your answers to the Multi-Choice Single-Correct questions in the end)

Hint: rule “p v q” can be seen as “p v q <- T”.

Input Program	p :- not p. p, q :- #true.
Command Line	clingo p3.txt 0
Output (truncated)