

Project Milestone 1: Solution to Introductory Clingo Program

Due Feb 5 by 11:59pm **Points** 5 **Submitting** a file upload
File Types pdf **Available** Jan 22 at 12am - Feb 6 at 2:59am

This assignment was locked Feb 6 at 2:59am.

Instructions:

This is an individual task- please download the template and follow the steps to fill the table. Then submit the template in PDF format.

OVERVIEW

The aim of Milestone 1 is for you to become familiar with clingo, a powerful tool used to run answer set programs on your own machine. To help you start with clingo, please follow the three steps below using the submission prompts provided.

Step 1

Follow the instructions in the following clingo installation guide to download clingo on your own machine and test on the example program.

<https://github.com/zhunyoung/clingoTutorial>  (https://github.com/zhunyoung/clingoTutorial)

Note that the example clingo program

$1\{p(4..7)\}2.$

is called a **choice rule with cardinality constraint**.

You will learn the details about this concept in Module 4 but you don't need to understand those details to complete this project milestone (Milestone 1).

Instead, we choose this program intentionally so that you can only find out the stable models through clingo.

Step 2

In Step 1, you saved the example program in a file “test.txt” and used clingo to find all its stable models. In Step 2, you need to compare your input program (the clingo program you saved in “test.txt”), command line, and output with the ones in the following table. If they are different, that indicates something may be wrong and you need to double-check the differences.

NOTE: Your command line may be different depending on your OS and your path. In future assignments, you may also truncate your output if it's too long but make sure your pasted output is important in the sense that it can support your answers in that assignment as many as possible.

InputProgram	1{p(4..7)}2.
CommandLine	clingo test.txt 0

Step 3

Write the stable models of the following clingo program ? and tell us how many stable model it has?

1{p(4..7)}2.

Download the following template and fill the table and submit the template in PDF format.

[Project milestone 1-Template.docx \(https://canvas.asu.edu/courses/143179/files/60719124?wrap=1\)](https://canvas.asu.edu/courses/143179/files/60719124?wrap=1)