

COMP 2049 Languages and Computation Coursework

Q & A

Question 1

When I test my solution, the JFLAP does not return “Accept” nor “Reject”.

A: This is because the JFLAP is still checking the input string. Remember, the membership problem can be solved only in grammars which do not have λ and unit productions. Therefore, if your grammar contains such transitions, the JFLAP may take a while to find out the answer or it may be not possible to find an answer.

Question 2

Is it required to avoid using λ and unit-productions in tasks 1, 2 and 3?

A: No. You only need to avoid using λ and unit-productions in task 4.

Question 3

Can we use “|” in JFLAP, e.g., $S \rightarrow A \mid B$?

A: No, you can't. $S \rightarrow A \mid B$ must be expressed as two productions, $S \rightarrow A$ and $S \rightarrow B$.

Question 4

Do we need to add white space in productions?

A: For task 1, 2 and 3, the white space does not matter. However, you are not allowed to add white spaces between symbols in JFLAP, e.g., “ $S \rightarrow \text{if}(E) S$ ” should be expressed as “ $S \rightarrow \text{if}(E)S$ ” in JFLAP.

Question 5

Do we need to provide descriptions for E and O in tasks 1, 2 and 3?

A: No, you only need to provide descriptions for new variables. The description of E and O are already provided in the task description.