

# HW #2

San José State University  
Department of Computer Science

CS 154: Formal Languages and Computability  
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## Problem (40 Points)

Given  $L = \{a^n b : n \geq 0\}$  over  $\Sigma = \{a, b\}$ .

Design an NFA with **no more than 3 states** to accept  $L'$  where  $L' = L \cup \{\lambda\}$

## What to Submit

1. Solve the problem using the provided JFLAP in the Canvas
2. Save it as: First\_Name.Last\_Name.**List\_Num**.jff  
If your first or last name has more than one part, **hyphenate** them and **don't use underscore**. (e.g.: ahmad.yazdan-khah.1.jff)  
Also note that **my fake list number** is written as '**1**', not '**01**'.
3. Upload it in the Canvas before the due time.

## Rubrics

- I'll test your code with 20 random strings. You'll get +2 for every success pass.
- You'll get **-5 for wrong filename!**

## General Hints

1. **Always read the requirements at least 10 times!**  
An inaccurate software engineer is unacceptable!
2. For **late submission policy**, please refer to the greensheet.  
**Absolutely no excuse will be accepted.**
3. After submitting your work, **always download** it and check whether the process of submission was fine.
4. This is an **individual assignment**. Therefore, exchanging idea is OK but **sharing the answer is NOK!**
5. We are using **JFLAP7.1** and it is NOT compatible with other versions such as JFLAP 7.0 or 8.
6. You can **submit multiple times** and I'll consider the latest one. Note that Canvas adds a number at the end of your file name in the case of multiple-submission.  
**I do NOT consider that number as the file name.**
7. If there is any **question, ambiguity, or concern**, please **open a discussion** in the Canvas.