

# COMP 4200: Assignment 4

Due on February 26, 2024

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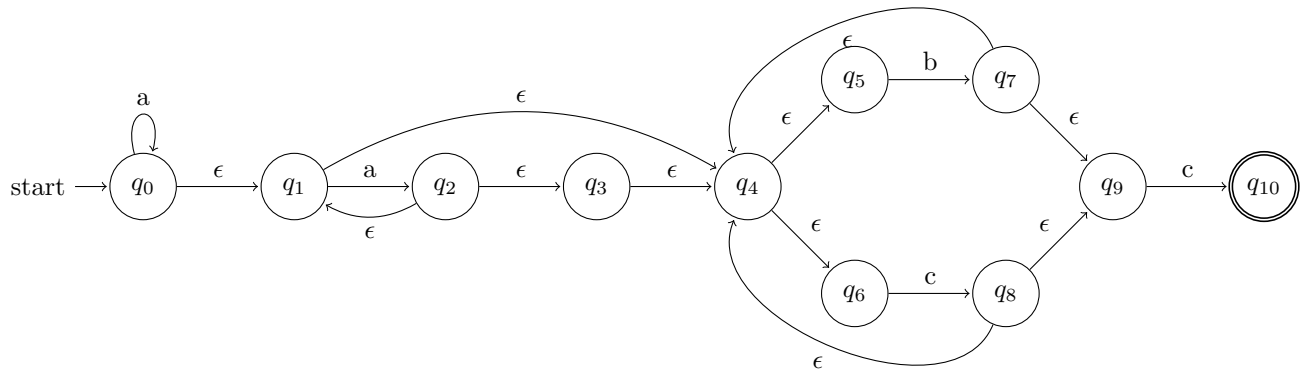
## Problem 1

Convert the following regular expressions into equivalent NFAs.

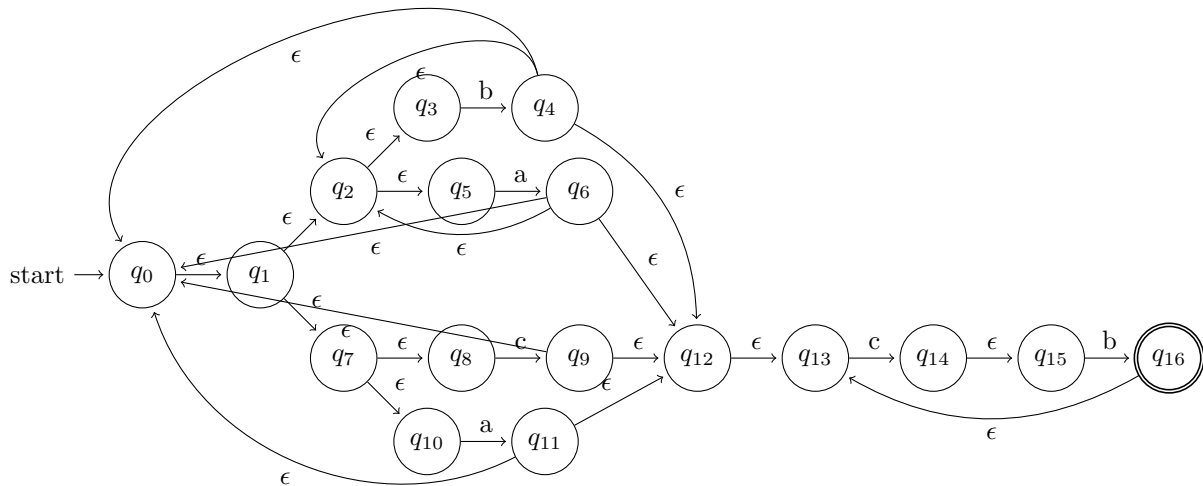
1.  $a^*(b \cup c)^*c$
2.  $((b \cup a)^* \cup (c \cup a))^*(cb)^*$

### Solution

#### Part One



#### Part Two



## Problem 2

Convert the 2 NFA's to equivalent regular expressions.

### Solution

#### Part One

1. Convert the NFA to a GNFA
2. Target the concatenations, fixing 4,5 and 8,9

#### Part Two

1. hi