**CS 5900 Compiler Test 1 Review In-class Exercise**

1. Assume *Σ = {a,b,c}*. Write regular expression for the following.

*All strings over Σ in which a’s never occur before c’s.*

1. Construct DFA without ε-transition for the following regular language.

*(abc)\*a+*

1. According to the Thompson's Construction, construct an NFA from the regular expression.

*( a | b | ε )+*

1. Construct a DFA based on the above NFA by using -closure.