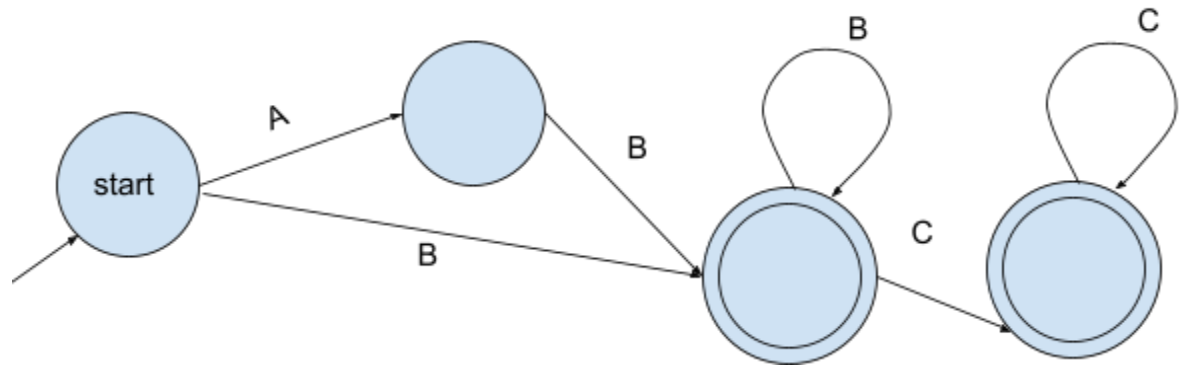


Q1.

- (a) Write a regular expression for the language “strings that has zero or one A, followed by one or more B, followed by zero or more C”

(i) $A?B^+C^*$

- (b) Draw a finite automaton that expresses the language recognized by this regular expression.



Q2.

- (a) Write a regular expression for the language “strings of A's and B's that begin with AB, end with AB and have no other substrings of the form AB”.

(i) $^A(AB)^A|^A(AB)(A^A|B^A A^A)(AB)^A$

- (b) Draw a finite automaton that expresses the language recognized by this regular expression.

