Swinburne University Of Technology

Faculty of Information and Communication Technologies

ASSIGNMENT COVER SHEET

Subject Code: COS30023
Subject Title: Languages in Software Development
Assignment number and title: 4, Automata
Due date: **September 8, 2014, 10:30, on paper**
Lecturer: Dr. Markus Lumpe

Your name:_____

Marker's comments:

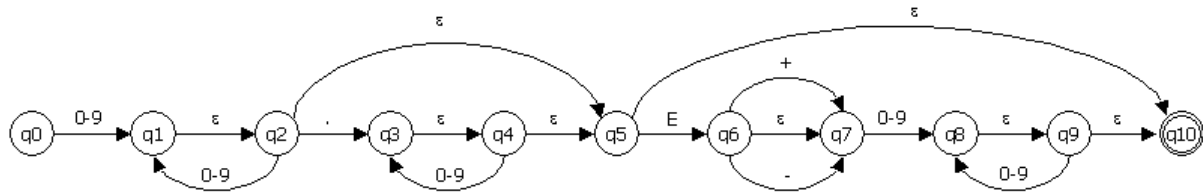| Problem	Marks	Obtained
3	100	
Total	100	

Extension certification:

This assignment has been given an extension and is now due on _____

Signature of Convener:_____

Problem Set 4: Automata

Problem 1

Consider the following automaton:

- Build the equation set for the states.
- Solve the equation set for q_0.
- Represent the result as regular expression.
- What type of token (aka terminal symbol) does this automaton accept?

Please note, the symbol ε stands for "can move without consuming any input." The alphabet of this automaton is $\Sigma = \{0,1,2,3,4,5,6,7,8,9,E,+,-,.\}$. Only q10 is an accepting state.

Submission deadline: Monday, September 8, 2014, 10:30.

Submission procedure: on paper.