

COMP3722 Programming Assessment 1.

Date: April 24, 2024

Due: 1630 ACST April 24 2024 Total: 20 marks

Write a Procedural Program (utilising the C programming language):

1/ for a DFA that recognises that following language

$L: \{w \mid w \text{ contains at least two } 0\text{'s and at most one } 1\} \text{ where } \Sigma = \{0,1\}.$

[10 marks]

2/ for a PDA that recognises $L: \{a^i b^j c^k \mid i, j, k \geq 0 \text{ and } i = j \text{ or } i = k\}$

[10 marks]

Provide both source code and evidence of program functionality.