CS4212 Compiler Design

Pop Quiz 1

Name: Tan Yee Jian

Student Number: A0190190L

1. Give the regular expression for the keyword "float" (typically found in C/C++/Java).

Assuming '.' means "any character", and '[.]' means literal dot.

[+-]?([0-9]*[.][0-9]+|[0-9]+[.][0-9]*)

This recognizes a float that can have signs and be 9. or .9

2. Give the regular expression for a valid NUS student number (not your NUSNET email ID but the number on your student card). Why is this regular expression alone insufficient to ensure the student number is a valid one?

A[0-9][0-9][0-9][0-9][0-9][0-9][A-Z]

Insufficient because last digit is a checksum.