CS341 Quiz - Spring 2021 Instructions: underline or box your answers. Name: Sihan Xu (ID: 101851563) (Section: 1)

1. How are the machine representations of int and float different from integers and real numbers?
2. What is the second phase of the compilation system?

compilation

1. Yes or No: could understanding how the compilation system works may help you avoid security holes? If yes, give an example.

YES, I

1. Which part of the computer system temporarily stores a program and its data while the CPU/processor is executing it?

RAM

1. Yes or No: is L2 cache typically smaller, faster, and costlier than L1 cache?

No,

1. What are at least two ways in which threads and processes differ?
2. What speedup results from improving 50% of a system by a factor of 2?
3. Please answer both of the following questions: 1. In general, can a multi-core processor run two processes in parallel? 2. In general, can both single-core and multi-core processors run two processes concurrently