CSUS
COLLEGE OF ENGINEERING AND COMPUTER SCIENCE
Department of Computer Science

CSc 135 Fall 2017 Radimsky

COMPUTING THEORY & PROGRAMMING LANGUAGES

Study Guide for Quiz 1

Review the notes I distributed including the various examples and the exercises done in class, the exercises in the handouts and the solutions posted on SacCT. There are few things you will need to remember, however, memory alone will not help you. I intend to test your understanding, not your memory. You need to explain what you do, not let me figure out what I want to make of a bunch of unconnected equations or pictures.

Recursion

- 1. Write a recursive function/procedure which performs a certain task
- 2. Given a recursive function/procedure, what task does it perform?

Regular Expressions

- 1. Given a description of a language, give a regular expression generating that language.
- 2. Given a regular expression, what language does it generate?

Finite State Automata

- 1. Given a description of a language build an FSA which accepts that language.
- 2. Given an FSA, what language does it accepts?

Context-Free Grammars

- 1. Given a grammar and a string, determine if the string belongs to the language generated by the grammar.
- 2. Given the description of a language, devise a grammar which generates that language