

## Assignment 4

1. Consider the following grammar

$$S \rightarrow cAt$$

$$A \rightarrow a \mid \varepsilon$$

- (a) Construct First sets and Follow sets for the nonterminals in the grammar.
- (b) Construct a recursive-decent parser (pseudo code) for the grammar.
- (c) Construct the LL(1) parsing table for the grammar.
- (d) Show the behavior of the parser on the sentence “cat”.

**Deadline: April 11 (Monday), 2022**