## King Saud University College of Computer and Information Sciences Computer Science Department



## CSC 340: Programming Language and Compilation Homework #2

## First and Follow Sets

Due Date: Feb 25th Before 1:00 PM through LMS

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Compute FIRST and FOLLOW sets for each of the following grammars.

- 1.  $S \rightarrow 0S1 \mid 01$
- 2.  $S \rightarrow S + S|SS|(S)|S^*|a$
- 3.  $S \rightarrow SS + |SS*|a$
- 4.  $S \rightarrow (L) \mid a$  $L \rightarrow L, S \mid S$
- 5.  $S \rightarrow Sx$ 
  - $S \rightarrow S,y$
  - $S \rightarrow y$
- 6. S→S(S)S
  - E→€
- 7. E →TE'
  - E'→+TE'| €
  - $T \rightarrow FT'$
  - T'→ \*FT'|€
  - $F \rightarrow (E) \mid id$