## Class Exercise, 2/27/2020

We would like a context-free grammar to generate all if-then-else statements. Assume the following meaning for symbols:

- i if
- $\mathbf{c}$  condition
- e else
- s statement

We would like to generate strings like *ics icses icicses icicses* 

- Build a context-free grammar that generates such statements.
- Is your grammar ambiguous?
- If yes, can you make it non ambiguous?
- Can you also generate sequences of statements like s ; s and brackets like  $ic\{ic\{s;s\}e\{s;s;s\}\}$