

Oct 19

COMPSCI 3331

Fall 2022

What's next?

- ▶ Midterm marks: after reading week.
- ▶ Assignment 1: Marks available now.
- ▶ Assignment 2: due today.
- ▶ Quiz 3 marks available now.
- ▶ Quiz 4 after reading week - **Lectures 8 and 9.**
- ▶ Assignment 3: available by Nov 8 at the **latest.**
- ▶ Office Hours Thursday - 1-3 PM.

CNF - ε productions

$S \rightarrow ABDE$

$A \rightarrow BDa \mid D$

$B \rightarrow aaE$

$D \rightarrow \varepsilon \mid C \mid G$

$E \rightarrow DD \mid aab$

$F \rightarrow DE \mid \varepsilon$

$G \rightarrow aaa$

Which variables are nullable?

CNF - unit pairs

$S \rightarrow$

$A \rightarrow$

$B \rightarrow$

$D \rightarrow$

$E \rightarrow$

$F \rightarrow$

$G \rightarrow$

What are the unit pairs?

CNF - useless symbols

$S \rightarrow$

$A \rightarrow$

$B \rightarrow$

$D \rightarrow$

$E \rightarrow$

$F \rightarrow$

$G \rightarrow$

What are reachable / generating symbols?

CNF - letter productions

$S \rightarrow$

$A \rightarrow$

$B \rightarrow$

$D \rightarrow$

$E \rightarrow$

$X_a \rightarrow a$

$X_b \rightarrow b$

$X_c \rightarrow c$

CNF

$S \rightarrow$

$A \rightarrow$

$B \rightarrow$

$D \rightarrow$

$E \rightarrow$

$X_a \rightarrow a$

$X_b \rightarrow b$

$X_c \rightarrow c$