

Compilers

CMPT 432

– Lab 4

Goals	Analyzing Grammars
Notes	There is a lot that careful analysis of a grammar can tell us in order to help us build a better compiler. Let's take a look, starting with First and Follow sets.
Resources	<i>Crafting a Compiler</i> <ul style="list-style-type: none">• Read chapters 4.5 and 5.9• Do exercises 4.9 (First and Follow set) and 5.10 (dangling else parse trees) <i>Dragon</i> <ul style="list-style-type: none">• Read chapters 4.1 and 4.4.2• Do exercise 4.4.3 (First and Follow set)
Submitting	Commit a PDF of your work to your GitHub repository and I'll take a look at it.

$$\begin{array}{lll} Z \rightarrow d & Y \rightarrow \epsilon & X \rightarrow Y \\ Z \rightarrow X Y Z & Y \rightarrow c & X \rightarrow a \end{array}$$

GRAMMAR 3.12.

	nullable	FIRST	FOLLOW
X	yes	a c	a c d
Y	yes	c	a c d
Z	no	a c d	

from *Modern Compiler Implementation in Java* by Andrew Appel