# Lab 4 Compilers Spring 2022

## Chris Pellerito Christopher.Pellerito1@Marist.edu

#### 1. Exercise 4.9

```
\begin{aligned} & FIRST(S) = \{a, b, c, d\} \ FOLLOW(S) = \{a, b, c, d, e\} \\ & FIRST(B) = \{b, c, d\} \ FOLLOW(B) = \{b, c, d, e\} \\ & FIRST(C) = \{c, d\} \ FOLLOW(C) = \{c, d, e\} \end{aligned}
```

#### 2. Exercise 5.10

if expr then if expr then other else other

```
--stmt
---if
---expr
---then
---stmt
----if
---expr
----then
----stmt
----other
---else
---stmt
----other
--$
-S
--stmt
---if
---expr
---then
---stmt
----if
---expr
----then
----stmt
----other
----else
----stmt
----other
```

--\$

### 3. Exercise 4.4.3

 $FIRST(S) = \{a\} FOLLOW(S) = \{+, *\}$ 

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