

## PARSING PROOF

Program	$\text{First}(\text{Statemt}) \cap \text{Follow}(\text{Program})$ $\{W, X, Y, Z, I, D, R, O, C\} \cap \{G, \$\} = \emptyset$
statemt	$\text{First}(\text{assnmt}), \text{First}(\text{ifstmt}), \text{First}(\text{do}), \text{First}(\text{inout}), \text{First}(\text{progcalls})$ all pairwise disjoint
assnmt	no issue
ifstmt	$\{\%\} \cap \{\&\} = \emptyset$ $\text{First}(\text{Statemt}) \cap \{\%\} \cap \{\&\} = \emptyset$ $\{W, X, Y, Z, I, D, R, O, C\} \cap \{\%\} \cap \{\&\} = \emptyset$
do	$\text{First}(\text{Statemt}) \cap \{E\} = \emptyset$ $\{W, X, Y, Z, I, D, R, O, C\} \cap \{E\} = \emptyset$
inout	no issue
iosym	no issue
progcalls	no issue
comprsn	no issue
exprsn	$\{+\} \cap \text{Follow}(\text{exprsn}) = \emptyset$ $\{+\} \cap \{:,.\} = \emptyset$
factor	$\{*\} \cap \text{Follow}(\text{factor}) = \emptyset$ $\{*\} \cap \{+, :, .\} = \emptyset$
oprnd	$\text{First}(\text{integer}), \text{First}(\text{ident}), \text{First}(\text{bool}), \{\}$ all pairwise disjoint
opratr	no issue
ident	$\text{First}(\text{char}) \cap \text{Follow}(\text{ident}) = \emptyset$ $\{W, X, Y, Z, 0, 1\} \cap \{<, =, >, !, ^, +, :, ., *, \sim, ', '\} = \emptyset$
char	$\text{First}(\text{letter}) \cap \text{First}(\text{digit}) = \emptyset$ $\{W, X, Y, Z\} \cap \{0, 1\} = \emptyset$
integer	$\text{First}(\text{digit}) \cap \text{Follow}(\text{integer}) = \emptyset$ $\{0, 1\} \cap \{<, =, >, !, ^, +, :, ., *, \sim, ', '\} = \emptyset$
letter	no issue
digit	no issue
bool	no issue