

Static Semantic Errors of VEN Grammar

They are the errors that do not obey the following context-sensitive conditions:

1. Each distinct **<name>** may be **declared at most once in the <declaration-seq>** of any **<block>** and listed at most once in any **<parameter-list>**.
2. A **<name> contained in a command C** must either be **declared in some <block> containing C** or **listed in the <parameter-list> of some procedure containing C**. If there is more than one such defining occurrence of the **<name>**, it is the innermost one that applies in C.
3. The **<name> on the left side of an assignment command** must be **declared as a variable**, and **the expression on the right** must be **of the same type**.
4. A **<name>** occurring **as an integer** element **must be an integer variable**.
5. A **<name>** occurring **as a boolean** element **must be a boolean variable**.
6. The **<name> in a read** command must be an **integer variable**.
7. The **<name> in call** command must be of **type proc**. If the procedure so named has parameters, an **equal number of <name>s** must be present in the call, and the **type of each name must match the type of the corresponding parameter**.