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**Lab Terminal Q:2**

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**Q2: Explain 2 Code Functions of Your Mini Compiler**

1. **Syntax Analysis (Parser)**:
   * Constructs a parse tree using Yacc based on grammar rules.
   * Example:
   * statement : assignment ';'
   * | declaration ';';
2. **Semantic Analyzer**:
   * Validates type consistency and variable declarations.
   * Example:
   * if (!isDeclared(variable)) {
   * error("Variable not declared");
   * }