Chapter 4: Syntax Directed Translation

1. When to say syntax directed definition is L attributed? Give the basic requirements those are required for translation scheme. Give the ways to implement these requirements. Write and explain the algorithm for construction of a predictive syntax directed translator.
2. What is dependency graph? How it differs from parse tree? Explain in brief?
3. Explain top down translation of L-attributed definitions.
4. Describe syntax directed translation scheme using semantic action.
5. Show the implementation of syntax directed translation for 'if then else' statement.
6. Explain in detail Bottom-up evaluation of S-attributed definitions.
7. Describe the construction of dependency graph to show interdependencies among the inherited and synthesized attributes.
8. Explain SLR parsing algorithm with example.
9. What are S-attributed definitions for syntax-directed translation? Illustrate Bottom-up evaluation using these.
10. What are inherited attributes? Explain with an example statement.
    real id1,id2,id3.

11. Write short note:
    a) Form of Syntax directed definition
    b) DAG representation
    c) S-attributed tree
    d) L-attributed definition

12. Explain synthesized attributes and inherited attributes with suitable examples.
13. What is dependency graph? How it differs from parse tree? Explain.
14. What are synthesized attributes? Explain S-attribute tree with example: 3*5+4n

15. Explain Bottom-up evaluation of inherited definition.