

Chapter 6: Intermediate Code Generation

1. What are the various types of three address statements?
2. Explain types of 3-address statements
3. What are the three ways of intermediate representation? Explain with example $a := b * c + b * c$
4. Write the Syntax-directed definition to produce syntax trees for assignment statements.
5. Write the Semantic rules generating code for a while statement.
6. Write a short note on
 - a. Quadruples
 - b. Triples
 - c. Indirect triples
7. Write the Syntax directed translation scheme for nested procedures
8. Write the Semantic action for $E \rightarrow E1 + E2$ for type conversion within assignment.
9. Explain the Translation scheme using a numerical representation for Booleans
10. Write the Syntax-directed definition for following flow-of-control statements
 - a. if-then
 - b. if-then-else
 - c. while-do
11. Explain the Syntax-Directed Translation of Case Statements
12. List and explain the function used for Backpatching
13. What is Backpatching? Explain with the help of Backpatching for boolean expression