

1997 Paper 4 Question 4

Compiler Construction

Write brief notes on the possible target code sequences needed for the implementation of

- (a) dynamically-sized local vectors
- (b) labels and GOTO statements in a block-structured programming language
- (c) access to free variables of functions using the static chain method
- (d) an exception mechanism such as found in, for instance, ML or Modula-3

[5 marks each]