1996 Paper 6 Question 6

Compiler Construction

Programming languages are usually compiled into the machine code of the target computer, but sometimes an interpretive system is used. Discuss the relative merits of these two approaches. [7 marks]

Outline the key features of the design of an interpretive code that would be suitable for an implementation of the C programming language and describe the overall structure of an interpreter for it. [7 marks]

What techniques could be used to improve (a) the space efficiency, and (b) the time efficiency of interpretive codes? [6 marks]