CSCE 330 Fall 2003

QUIZ 5

Assigned Tuesday, 03-09-16

1. According to Betrand Mayer in “Design by Contract: The Lesson of Ariane” (*IEEE Computer*, January 1997, pp.129-130), what *can* you blame for the $500 million Ariane 5 disaster of June 4, 1996?

    (a) management

    (b) the programming language (Ada, in this case)

    (c) the design

    (d) the implementation

    (e) testing

    (f) reuse of a code module

    (g) the lack of specification of a reused code module

    Answer: the lack of specification of a reused code module.

2. Give a leftmost derivation of `{b=9;}` from the EBNF grammar of p.36 in your textbook.

    Answer: <program> => {<statement>} => {<identifier> = <expr>;} =>
    => {<letter> = <expr>;} => {b = <expr>;} =>
    {b = <number>;} => {b = <digit>;} => {b = 9;}