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CSCI 330-54

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Homework2

Sebesta Questions:

2. Plankalkül included array and record data structures.
5. The slowness of interpretation was accepted because of the lack of floating-point hardware making other parts of the computing process take much longer.
6. The IBM 704 first implemented floating-point hardware making it no longer require software to do floating-point calculations.
7. Plans were begun before the IBM 704 announcement in May 1954, but it was November 1954 when the developers officially titled the project FORTRAN.
8. The primary use of computers were scientific computation.
9. All of FORTRAN 1's control statements were based on IBM 704 instructions.
10. FORTRAN 2 added the individual compilation of subroutines.
11. FORTRAN 77 added logical loop control statements, character string handling, and if with an optional else clause.
14. Linguists wanted to use AI to develop natural language processing.
15. LISP was developed at MIT by John McCarthy and Marvin Minsky.
20. The lack of input and output statements affected ALGOL 60's chance of widespread use.
21. Backus-Naur Form (BNF) was used to describe the syntax of ALGOL 60.

22. COBOL used FLOW-MATIC as the basis of its design.

23. The design process for COBOL began in 1959.

24. Hierarchical data structures (records) were also implemented in COBOL.

25. The DoD was most responsible for COBOL's early success and survival.

36. Nonprocedural languages don't tell the computer how to do something but tell it what the result should look like.

37. Facts and rules populate a PROLOG database.

46. The first application area for Java was embedded electronic devices.

51. JavaScript is mainly used embedded in web browsers.

52. JavaScript is on the user-side of web browsers and PHP is on the server-side of web browsers.

57. C# introduced fall-through prevention to make sure that the program will not jump to the next case unless specified by a break statement.

59. Input to XSL processor is a XML data document and an XSLT document.

60. Output of an XSL processor is a new XML document.