Lab 01

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1 Crafting a Compiler

1.11.

The main techniques moss uses is document finger printing.Document fingerprinting produces hashes for each document and comparisons are made to find the similarities and differences of each document.If there are a bunch of hashes that look alike between 2 documents, then those documents are flagged for review. One thing that is different with moss is that if a student change's the structure of the code to product the same logic that does the same thing, the document fingerprints will be different. This is bad because the document fingerprints detect plagiarism when the structure is the same.

3.1.

main,keyword

[(,symbol][),symbol][,symbol]

[const,keyword][float,keyword][payment,id][=,symbol][384.00,num][;,symbol]

[float,keyword][bal,id][;,symbol]

[int,keyword][month,id][=,symbol][0,num][;,symbol]

[bal,id][=,symbol][15000,num][;,symbol] [while,keyword]

[(,symbol][bal,id][¿,symbol][0,num][),symbol][,symbol]

[printf,keyword][(,symbol][Month,id] [[bal,id][=,symbol][bal,id][-,symbol][payment,id][+,symbol][0.015,num][*,symbol][bal][;,symbol]

[month,id][=,symbol][month,id][+,symbol][1][;,symbol][,symbol][,symbol]

2 Dragon Book

1.6.1

The value assigned for w is $6 + 7$,
The value assigned for x is $6 + 7$,
The value assigned for y is $8 + 7$,
The value assigned for z is $8 + 7$.

1.1.4

The differences between a compiler and an interpreter is the compiler can read a program in one language and output an equivalent program in another language. The program is the same in the 2 different languages. The interpreter doesn't produce that new language. The interpreter just executes the source language and gives an output.