

Assignment: 1
Lexical Analyzer

Compiler Construction
COMP-451 (sec "B")

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FORMAN CHRISTIAN COLLEGE
(A CHARTERED UNIVERSITY)

Submitted to:
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Forman Christian College
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Finite-state machines (DFA, NFA)

Figure 1.

For Operators:

Keyword/Operation	Description
+, -, *, /	Adding, subtracting and multiplying floats
>, >=, <, <=, /=, //, &&, =, ==	To compare two float values.

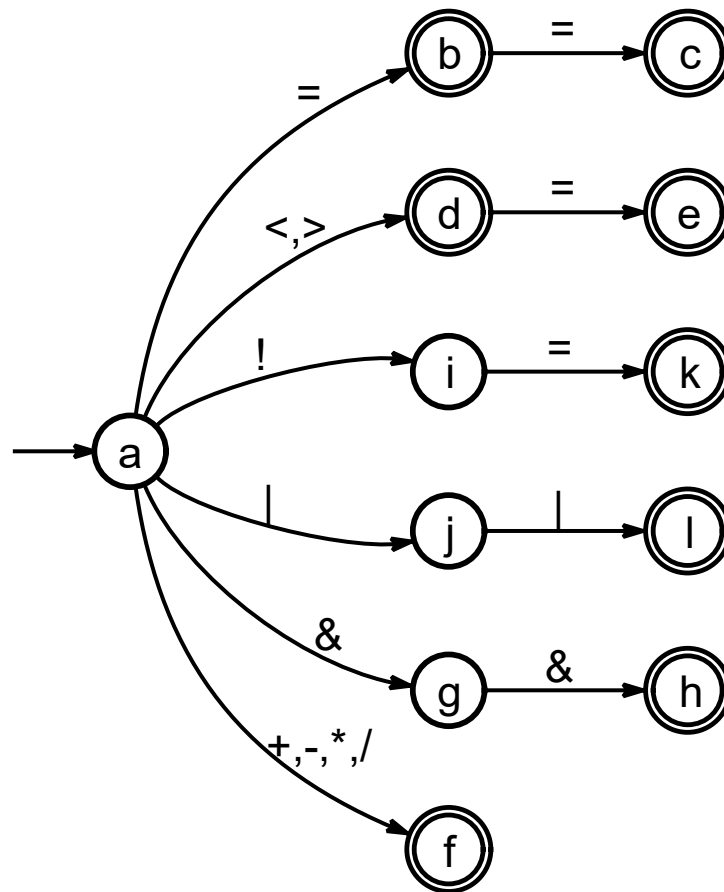


Figure 2.

For Reserved Words:

<i>Keyword/Operation</i>	<i>Description</i>
if	conditional branch
while	conditional loop
break	to exit from a conditional loop
print	prints a float value.

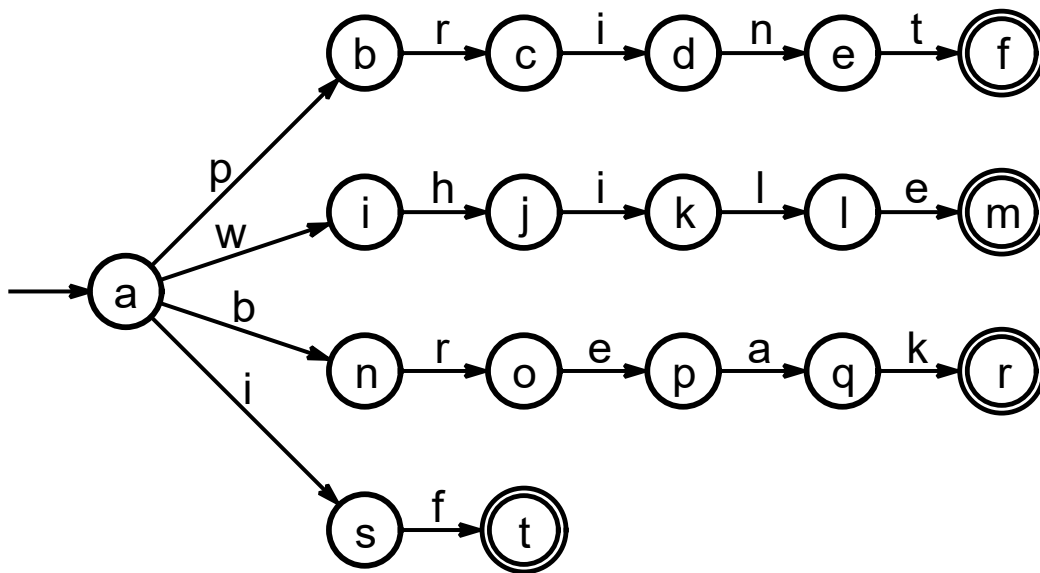


Figure 3.

For Brackets:

Keyword/Operation	Description
{,}	start or end of a if or while loop
(,)	start and end of a comparison statement

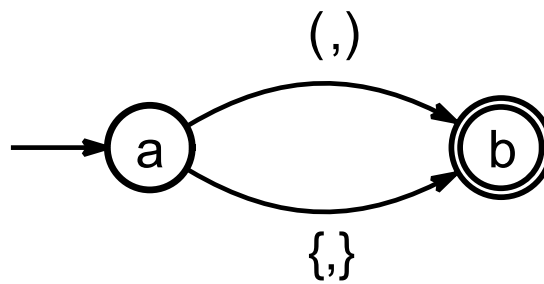


Figure 4.

For Float:

- Only float data type is supported.

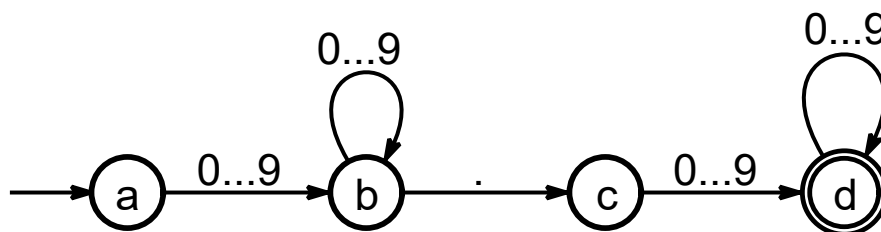


Figure 5.

For Identifiers:

- Valid identifier are letters followed by (optional) digits. (e.g. temp1, Name).

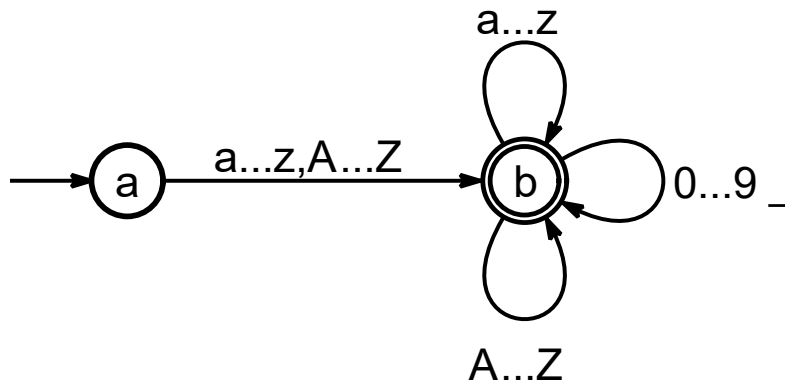


Figure 6. (Draft not included in code)

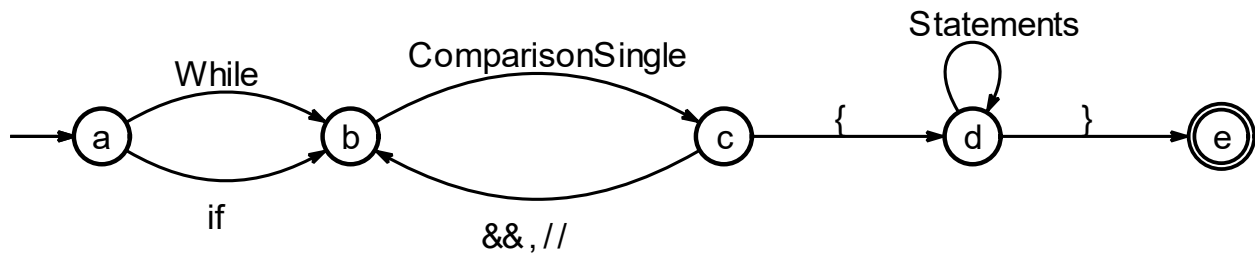
For Comparison or Loop Block:

Figure 7. . (Draft not included in code)

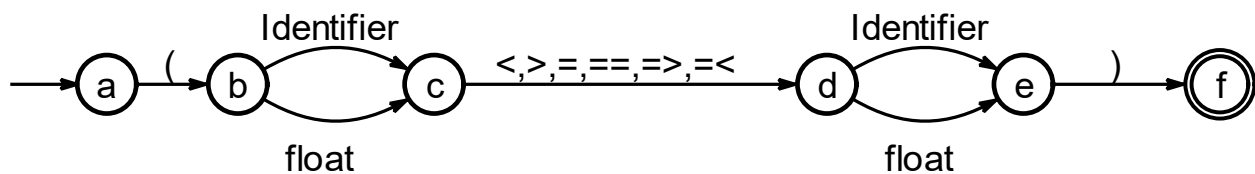
For Comparison Single:

Figure 8. . (Draft not included in code)

