Alan Thomas

CSI 130 -01CA

11/01/2014

Pg6-34:3,7,8abc,10,11,13,15,17,20,22,23,28

3.) 12 elements in the power set of {a,b,c,d}. P(S)={{},{a},{b},{c},{d},{a,b},{a,c}{a,d},{b,c},{b,d},{c,d},{a,b,c,d}}

7.) Attached to back.

8.)

a.) X = c,e,g,d

b.) Y = f,g,b,e,c

c.) Z = f,g,d

10.) An FA (finite automata) is a language recognition device.

11.)

a.) Alphabet – A finite set of characters.

b.) Language – Words composed of characters from an alphabet.

c.) Finite Automata – Recognizes patterns and accepts or reject those patterns from a predetermined criteria.

13.)

15.)

20.) <if\_statement> ::= <if><else\_if>

<if> ::= if(<expr>){<body>}

<body> ::= <expr>;|<expr>;<body>

<else\_if> ::= else\_if(<expr>){<body>}

<body> ::= <expr>;|<expr>;<body>

21.) <var\_declaration> ::= <var\_type><value>

<var\_type> ::= var\_type = <expr>;

<expr> ::= <value>;

22.) We use CFGs to determine syntactically correct sentences.