SSN COLLEGE OF ENGINEERING, KALAVAKKAM DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING Compiler Lab – UCS 1602

Programming Assignment-7- Generate intermediate code using Lex and Yacc Tools

Develop an intermediate code generator to generate three address code for the following statements by writing suitable syntax directed translation rules

- 1. Assignment statements
- 2. Boolean expressions

INPUT

a := b * -c + b * -c

x:= a<b or c<d and e<f

OUTPUT

t1 = -c

t2 =b*t1

t3 = -c

t4 = b*t3

t5=t2 + t4

a=t5

100: if a<b goto 103

101: t1 := 0

102: goto 104

103: t1 := 1

104: if c<d goto 107

105: t2 := 0

106: goto 108

107: t2 := 1

108: if e<f goto 111

109: t3 := 0

110: goto 112

111: t3 := 1

112: t4 := t2 and t3

113: t5 := t1 or t4

114: x=t5