

Assignment No. 1(a) :

Implement a token recognizer. Input instruction in C.

Output should be type of tokens in that instruction.

a). Keywords are to be recognized by separate transition diagram.

b). Keywords recognized by reserved word strategy.

In our subset of C language :

a). All C keywords are valid.

b). All C identifiers are valid.

c). All numeric constants are valid.

d). Valid operators are: +, -, \*, /, %, >, <, =.

e). Valid Delimiters are : " ", ",", ";", "{", "}", "(", ")", "[", "].

Assignment No. 1(b) :

Implement a token recognizer. Input instruction in C.

Output should be type of tokens in that instruction. Keywords are to be recognized by srparate transition diagram.

Assignment No. 2:

Write a lexical analyzer with C language which only performs lexical analysis of a subset of C language. The subset language uses the following

a)keywords : if,else,case,goto,while,break,do,for

b)Identifier : letter(letter/digit)\*delimiter

c)Arithmetic operator : +,-,\*,/,%

d)Relational operator : <,>,<=,>=,!=,==,>=

e)Logical operator : &&,||

f)Assignment operator : =

g)Increment and Decrement operator : ++.--

h)Punctuation symbol : {,},,,,;

ASSIGNMENT NO. : 3

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#### ASSIGNMENT NO. :4

Implement a SR parser whose input is a CFG and input sentence(S) and the output is the sequence of production to be used to reduce the start symbol .

#### ASSIGNMENT NO. : 5

Implement an operator precedence parser assuming conventional precedence of operator

for construction of precedence table. Your parser would be able to convert input grammar

to operator grammar if regular and it is possible to perform the conversion.

#### ASSIGNMENT NO. : 6

Implement an operator precedence parser assuming conventional precedence of operator

for construction of precedence table. Your parser would be able to perform error recovery

and detection and print diagnostic message.

#### ASSIGNMENT NO. : 7

Write the lexical analyzer “L1” in C whose input should be the “L1” source program and output should be a sequence of token along with their times. The “L1” source program consists of two parts –

a) a sequence of auxiliary definition (for different tokens)

b) Followed by a sequence of transition rules (return to different sub routines for different tokens)

Return value are the type of token to the parser.

## ASSIGNMENT NO. : 8

Implement one LL(1) parser with and without error handling capacity, the grammar for the parser is fixed and input insert text to be parser and the output is the sequence of production use.