

Lab Assignment Week 5 : Compiler Design

Lexical Analysis

LEX/flex() : Lexical Analyzer generator Tool

LEXICAL ANALYSER FOR ENGLISH (Partial)

Q1. Prepare a Lexical analyzer which can read a text file containing valid English statements and produces tokens such as: Adjective , Article, Adverb, Conjunction, Interjection Noun Preposition Pronoun Verb

ADJECTIVE - Examples: yellow, pretty, useful, old, older, oldest

ARTICLE - Examples: a, an, the

ADVERB - Examples: very, extremely, carefully

CONJUNCTION - Examples: and, but, or

INTERJECTION - Examples: Oh!, Aha!

NOUN - Examples: mouse, fire, Michael

PREPOSITION - Examples: in, about, toward

PRONOUN - Examples: he, this

VERB - Examples: take, is, fire, go went gone

LEXICAL ANALYSER FOR C (Partial)

Q 2. Define patterns and generate lexical analyzer for C language using LEX/flex() to Tokenize -valid integer, valid floating point number, valid character/String Literal, valid identifier, valid Keyword, a valid Operator – Arithmetic, Relational, Assignment etc.

Input : A Program in C

Output: Tokens