CSE420 (Compiler) Lab, Summer 2017

Assignment 1

**Problem Description:**

In this assignment, your job is to program a simple lexical analyzer given stream of chars. You will need to read a file named "input.txt" to collect all chars. For simplicity, input file will be ajava program without headers and methods. Then you will identify all the numerical values, identifiers, keywords, math operators, logical operators and others [distinct]. See the example for more details. You can assume that, there will be a space after each keywords. But, removal of space will add bonus point.

**Input:**

int a, b, c;

float d, e;

a = b = 5;

c = 6;

if ( a > b)

{

c = a - b;

e = d - 2.0;

}

else

{

d = e + 6.0;

b = a + c;

}

**Output:**

**Keywords:**int, float, if, else

**Identifiers:**a,b,c, d, e

**Math Operators:** +, -, =

**Logical Operators:**>

**Numerical Values:** 5, 6, 2.0, 6.0

**Others:** , ; ( ) { }

**Submission Deadline: 29/01/2018**