Compiler Design (CS-307)
Winter Semester 2015-16
Lab 2

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Write a C program to implement lexical analyzer for 'if' statement.

Table 1: Lexeme and Tokens for IF statement

IF	$< 1,1 >$
variable-name	$< 2, \#address >$
numeric-constant	$< 3, \#address >$
;	$< 4,4 >$
(	$< 5,0 >$
)	$< 5,1 >$
{	$< 6,0 >$
}	$< 6,1 >$
>	$< 62,62 >$
>=	$< 620,620 >$
<	$< 60,60 >$
<=	$< 600,600 >$
!	$< 33,33 >$
!=	$< 330,330 >$
=	$< 61,61 >$
==	$< 610,610 >$

Sample Output:
Enter the input string: $if(a >= b)max = a$;

if	$< 1,1 >$
(	$< 5,0 >$
a	$< 2,0960 >$
>=	$< 620,620 >$
b	$< 2,09c4 >$
)	$< 5,1 >$
max	$< 2,0A28 >$
=	$< 61,61 >$
a	$< 2,0960 >$
;	$< 4,4 >$

Submission Deadline: January 26, 2015 on or before 5 PM IST.

Submission Guideline:

1. Submit your assignment on ashish_p@iiitvadodara.ac.in and mention subject line and zip/rar folder named as " $<ID>\_CS307\_Lab2$ ".

2. Name your programs as " $<ID>\_CDL\_<Q.No.>.c$ ".

3. It is expected to carry out this Lab individually. However, you are free to refer books for file handling program and discussion with friends. But this does not imply to copy and paste code from internet or friend which will lead to ZERO marks.