**Compiler Design (Lab 4)**

**Problem:**

1. In the lex program given for C in the class Add a new pattern with token String and DecimalNum. Aso add the dot operator as ”.”. Note that dot exist in DecimalNum also. The two different types of dots need to be distinguished. The STRING pattern consists of a double­ quote ( " ) , any string of characters and a final double-quote. However, if a double-quote appears in the string, it must be escaped by preceding it with a backslash () , and therefore a backslash in the string must be represented by two backslashes.

2. In SQL, keywords and identifiers are case-insensitive. Write a Lex program that recognizes the keywords SELECT, FROM, and WHERE (in any combination of capital and lower-case letters) , and token ID, which for the purposes of this exercise you may take to be any sequence of letters and digits, beginning with a letter.

**Input-Output:**

1.

2. The program requires a read.sql file as an input and provides the count of select, from, where keywords and identifiers as an output with the desired changes.