## Assignment - VIII Compiler Design Laboratory (CS3075) Amiya Chowdhury (122CS0067) Date:24/10/2024

The description of source language operators are given as follows

Operators Precedence Associativity
Parenthesis () Highest Right to left
Unary minus (-) Left to right

\*/% Left to right

+- Left to right

= Lowest Right to left

Identifiers A-Z are single length strings represent variables stored in memory. Temporary t1,t2,... are temporary variables in three-address intermediate code.

Write a program to generate three-address code for a given algebraic expression following the given information.

Sample input: A-B+C/D/E

Output

t1=A-B t2=C/D t3=t2/E t4=t1+t3

Solution File: lab8.l, lab8.y

Compile with g++ (C++ libraries used in program)

## **Working Screenshot:**

```
[(base) amiyachowdhury@Amiyas-M
ENTER ARITHMETIC EXPRESSION (f
A+B*D
t0 = B X D
t1 = A+t0
VALID EXPRESSION!! Postfix exp
A B D X +
C*(A+B)/D
t0 = A+B
t1 = C X t0
t2 = t1 / D
VALID EXPRESSION!! Postfix exp
C A B + X D /
```