# Experiment No:9

**AIM:**To convert given expression into Three Address Code.

Write three address code for following expression

a=-c*d+b-c

**ALGORITHM:**

Step1: Begin the program
Step2 : The expression is read from the file using a file pointer
Step3 : Each string is read and the total no. of strings in the file is calculated.
Step4: Each string is compared with an operator; if any operator is seen then the previous string and next string are concatenated and stored in a first temporary value and the three address code expression is printed
Step5 : Suppose if another operand is seen then the first temporary value is concatenated to the next string using the operator and the expression is printed.
Step6 : The final temporary value is replaced to the left operand value.
Step7 : End the program.

**COMPUTING ENVRONMENT**
Platform: ubuntu
Programming Language: C / C++
**Expected Output:**

**Input:** a=-c*d+b-c

**Output :** out.txt
t1=- int1
t2=t1*int2
t4=t2+int3
t5=t4-int1
int4=t5

**Conclusion:** Thus the program to covert given expression into Three Address Code is executed.

**VIva Voce Questions:**

1. Which of the following is are the forms of intermediate code representation?

Answer: Intermediate code can be represented in three forms, which are postfix notation, Syntax trees, Three address code.

2. What is Indirect Triple:

Answer: Indirect Triples –This representation makes use of pointer to the listing of all references to computations which is made separately and stored. Its similar in utility as compared to quadruple representation but requires less space than it. Temporaries are implicit and easier to rearrange code.