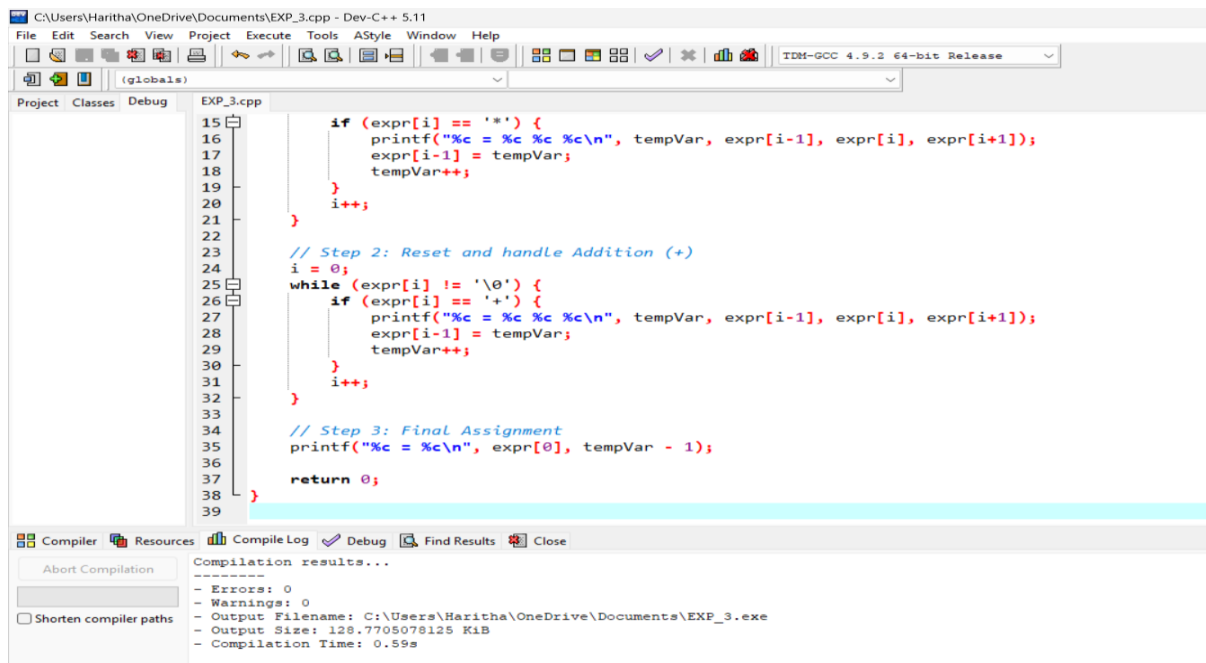


EXPERIMENT-16

AIM:

Write a C Program to Generate the Three address code representation for the given input statement.

PROGRAM:



```
C:\Users\Haritha\OneDrive\Documents\EXP_3.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug EXP_3.cpp
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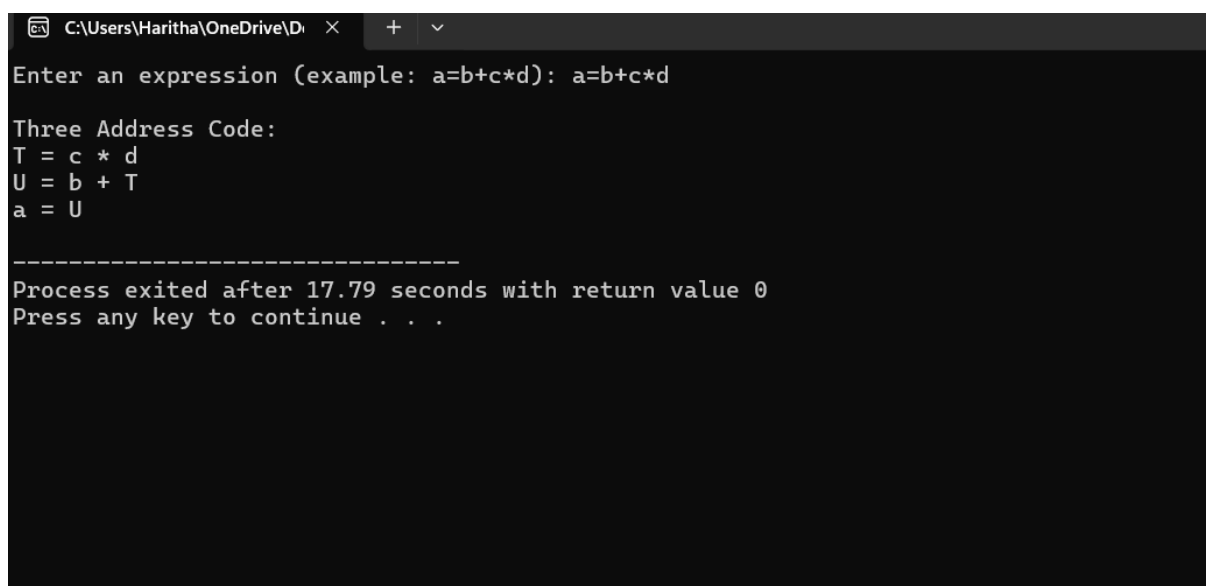
    if (expr[i] == '*') {
        printf("%c = %c %c %c\n", tempVar, expr[i-1], expr[i], expr[i+1]);
        expr[i-1] = tempVar;
        tempVar++;
    }
    i++;

// Step 2: Reset and handle Addition (+)
i = 0;
while (expr[i] != '\0') {
    if (expr[i] == '+') {
        printf("%c = %c %c %c\n", tempVar, expr[i-1], expr[i], expr[i+1]);
        expr[i-1] = tempVar;
        tempVar++;
    }
    i++;
}

// Step 3: Final Assignment
printf("%c = %c\n", expr[0], tempVar - 1);
return 0;
}

Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Haritha\OneDrive\Documents\EXP_3.exe
- Output Size: 128.7705078125 KiB
- Compilation Time: 0.59s
```

OUTPUT:



```
C:\Users\Haritha\OneDrive\Documents\EXP_3.exe
Enter an expression (example: a=b+c*d): a=b+c*d

Three Address Code:
T = c * d
U = b + T
a = U

-----
Process exited after 17.79 seconds with return value 0
Press any key to continue . . .
```