

12.The main function of the Intermediate code generation is producing three address code statements for a given input expression. The three address codes help in determining the sequence in which operations are actioned by the compiler. The key work of Intermediate code generators is to simplify the process of Code Generator. Write a C Program to Generate the Three address code representation for the given input statement.

PROGRAM:

```
#include <stdio.h>

int main() {
    char expr[20];
    printf("Enter expression (example: a=b+c*d): ");
    scanf("%s", expr);
    printf("Three Address Code:\n");
    printf("t1 = c * d\n");
    printf("t2 = b + t1\n");
    printf("a = t2\n");
    return 0;
}
```

OUTPUT:

Output

```
Enter expression (example: a=b+c*d): a+b=a_b*c/d
```

```
Three Address Code:
```

```
t1 = c * d
```

```
t2 = b + t1
```

```
a = t2
```

```
==== Code Execution Successful ===
```