Lab Practice # 4

1. Write a C program that generates Three Address Code for a user-given input expression.

Sample Input:
x=a*b+c
Output:
t1=a*b
t2=t1+c
x=t2

2. Write a C program that eliminates Left Recursion from a grammar.

Input:
Enter the Productions: E->E+T
Output:
E->+TE’
Input:
T->T*F
Output:
T-> *FT’
Input:
F->id
Output:
No Left Recursion

3. Write a C Program that implements code optimization using constant folding.

Input:
```
#include <studio.h>
main() {
float pi=3.14,r,a;
a=pi*r*r;
printf("a=%f",a);
return 0;
}
```
Output:
```
#include <studio.h>
main() {
float pi=3.14,r,a;
a=3.14*r*r;
printf("a=%f",a);
return0;
}
```