```c
#include <stdio.h>
#include <string.h>

int main(){
    char nt, p1[20], p2[20];
    printf("Enter production (E->ab|ac): ");
    scanf("%c->%[^|]|%s",&nt,p1,p2);
    int i=0;
    while(p1[i] && p2[i] && p1[i]==p2[i]) i++;    // find common prefix
    if(i==0) printf("No Left Factoring\n");
    else {
        printf("%c->",nt);
        for(int j=0;j<i;j++) printf("%c",p1[j]);
        printf("%c'\n%c'->%s|%s\n",nt,p1+i,p2+i);
    }
}
```

Compile Log Debug Find Results Close

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled9.exe
- Output Size: 129.44238281250 KiB
- Compilation Time: 0.16s
```

```
Enter production (E->ab|ac): E->ab|ac;
E->a
--------------------------------
Process exited after 24.88 seconds with return value 3221225477
Press any key to continue . . .
```

```c
#include <stdio.h>
#include <string.h>
char str[50]; int i=0;

void E(); void E_(); void T(); void T_(); void F();

void E(){ T(); E_(); }
void E_(){ if(str[i]=='+'){ i++; T(); E_(); } }
void T(){ F(); T_(); }
void T_(){ if(str[i]=='*'){ i++; F(); T_(); } }
void F(){
    if(str[i]=='('){ i++; E(); if(str[i]==')') i++; else {printf("Error\n"); return;} }
    else if(str[i]=='i'&&str[i+1]=='d'){ i+=2; }
    else { printf("Error\n"); return; }
}

int main(){
    printf("Enter expression: ");
    scanf("%s",str);
    E();
    if(str[i]=='\0') printf("Parsing Successful\n");
    else printf("Error\n");
}
```

Compile Log Debug Find Results Close

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled10.exe
- Output Size: 129.3935546875 KiB
- Compilation Time: 0.17s
```

```
Enter expression: id+id*id
Parsing Successful

--------------------------------
Process exited after 16.13 seconds with return value 0
Press any key to continue . . .
```

```c
#include <stdio.h>
#include <ctype.h>
#include <math.h>

char *p;

int E(); int T(); int F(); int P();

int E(){ int v=T(); while(*p=='+'||*p=='-'){ char op=*p++; int r=T(); v=(op=='+')?v+r:v-r; } return v; }
int T(){ int v=F(); while(*p=='*'||*p=='/'){ char op=*p++; int r=F(); v=(op=='*')?v*r:v/r; } return v; }
int F(){ int v=P(); if(*p=='^'){ p++; v=pow(v,F()); } return v; }
int P(){ int v=0; if(*p=='('){ p++; v=E(); if(*p==')') p++; } else while(isdigit(*p)) v=v*10+(*p++-'0'); return v; }

int main(){
    char s[100]; printf("Enter expression: ");
    scanf("%s",s); p=s;
    printf("Result=%d\n",E());
}
```

Compile Log Debug Find Results Close

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled13.exe
- Output Size: 151.5173828125 KiB
- Compilation Time: 0.16s
```

```
Enter expression: 2+3*4
Result=14

--------------------------------
Process exited after 14.76 seconds with return value 0
Press any key to continue . . .
```

```c
#include <stdio.h>
#include <ctype.h>
#include <math.h>

char *p;

int E(); int T(); int F(); int P();

int E(){ int v=T(); while(*p=='+'||*p=='-'){ char op=*p++; int r=T(); v=(op=='+')?v+r:v-r; } return v; }
int T(){ int v=F(); while(*p=='*'||*p=='/'){ char op=*p++; int r=F(); v=(op=='*')?v*r:v/r; } return v; }
int F(){ int v=P(); if(*p=='^'){ p++; v=pow(v,F()); } return v; }
int P(){ int v=0; if(*p=='('){ p++; v=E(); if(*p==')') p++; } else while(isdigit(*p)) v=v*10+(*p++-'0'); return v; }

int main(){
    char s[100]; printf("Enter expression: ");
    scanf("%s",s); p=s;
    printf("Result=%d\n",E());
}
```

Compile Log Debug Find Results Close

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled13.exe
- Output Size: 151.5173828125 KiB
- Compilation Time: 0.16s
```

```
Enter expression: a+b*c
Result=0

--------------------------------
Process exited after 10.8 seconds with return value 0
Press any key to continue . . .
```

```c
#include <stdio.h>
#include <string.h>

int check(char *s){
    int i=0,j=strlen(s)-1;
    while(i<j) if(s[i++]!='a'||s[j--]!='b') return 0;
    return (i>j);
}

int main(){
    char s[50];
    scanf("%s",s);
    printf(check(s)?"Valid\n":"Invalid\n");
}
```

Compile Log Debug Find Results Close

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled11.exe
- Output Size: 128.62890625 KiB
- Compilation Time: 0.16s
```

```
aabb
Valid

--------------------------------
Process exited after 3.786 seconds with return value 0
Press any key to continue . . .
```

```c
#include <stdio.h>
#include <string.h>

struct sym{char n[20],t[10];} tab[50]; int c=0;

void ins(char *n,char *t){ strcpy(tab[c].n,n); strcpy(tab[c++].t,t); }
int sea(char *n){ for(int i=0;i<c;i++) if(!strcmp(tab[i].n,n)) return i; return -1; }
void disp(){ for(int i=0;i<c;i++) printf("%s\t%s\n",tab[i].n,tab[i].t); }

int main(){
    int ch; char n[20],t[10];
    while(1){
        scanf("%d",&ch);
        if(ch==1){ scanf("%s %s",n,t); ins(n,t); }
        else if(ch==2){ scanf("%s",n); int i=sea(n); printf(i!=-1?"Found\n":"Not Found\n"); }
        else if(ch==3) disp();
        else break;
    }
}
```

Compile Log | Debug | Find Results | Close

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\sreel\OneDrive\Desktop\Untitled10.exe
- Output Size: 130.0419921875 KiB
- Compilation Time: 0.17s
```

```
1 a int
2 b float
Not Found
Not Found
3
a       int
4 b

--------------------------------
Process exited after 25.94 seconds with return value 0
Press any key to continue . . .
```