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PROGRAM CODE

```
#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <stdbool.h>

char tempVar = 'A';

bool resolveOperator(char op, char input[]){
    int n = strlen(input);
    for (int i=0;i<n;++i){
        if (input[i]==op){
            if (i==0 || i==(n-1)){
                printf("Error\n");
                return false;
            }
            printf("%c\t%c\t%c\t%c\n",op,tempVar,input[i-1],input[i+1]);
            char temp[100];
            strcpy(temp,input+i+2);
            input[i-1] = tempVar++;
            strcpy(input+i,temp);
        }
    }
    return true;
}

void parse(char input[]){
    printf("Operator\tDestination\tOperand 1\tOperator 2\n");
    if (!resolveOperator('/',input)) return;
```

```
if (!resolveOperator('*',input)) return;
if (!resolveOperator('+',input)) return;
if (!resolveOperator('-',input)) return;
// Resolve = symbol
if (strlen(input)==3 && input[1]=='='){
    printf("\t%c\t%c\n",input[0],input[2]);
    return;
}
if (strlen(input)>1){
    printf("Error\n");
}
}

int main(){
    char input[100];
    scanf("%s",input);
    parse(input);
    return 0;
}
```

OUTPUT:

input.txt:

q=a+b-c/d*2

Output:

Operator	Destination	Operand 1	Operator 2
/	A	c	d
*	B	A	2
+	C	a	b
-	D	C	B
=	q	D	