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

#define SIZE 100
char stack[SIZE];
int top = -1;

void push(char item){
        if(top >= SIZE-1)
        {
                printf("\n Stack Overflow.");
        }
        else
        {
                top = top+1;
                stack[top] = item;
        }
}


char pop(){
        char item ;

        if(top <0)
        {
                printf("stack under flow: invalid infix expression");
                getchar();
                exit(1);
        }
        else
        {
                item = stack[top];
                top = top-1;
                return(item);
        }
}

int is_operator(char symbol){
        if(symbol == '^' || symbol == '*' || symbol == '/' || symbol == '+' || symbol =='-')
        {
                return 1;
        }
```

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}

int is_operator(char symbol){
        if(symbol == '^' || symbol == '*' || symbol == '/' || symbol == '+' || symbol =='-')
        {
                return 1;
        }
        else
        {
        return 0;
        }
}


int precedence(char symbol){
        if(symbol == '^')
        {
                return(3);
        }
        else if(symbol == '*' || symbol == '/')
        {
                return(2);
        }
        else if(symbol == '+' || symbol == '-')
        {
                return(1);
        }
        else
        {
                return(0);
        }
}

void InfixToPostfix(char infix_exp[], char postfix_exp[]){
        int i, j;
        char item;
        char x;
        push('(');
        strcat(infix_exp,")");
        i=0;
        j=0;
        item=infix_exp[i];

        while(item != '\0'){
                if(item == '('
```

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        }
}

void InfixToPostfix(char infix_exp[], char postfix_exp[]){
        int i, j;
        char item;
        char x;
        push('(');
        strcat(infix_exp,")");
        i=0;
        j=0;
        item=infix_exp[i];

        while(item != '\0'){
                if(item == '(')
                {
                        push(item);
                }
                else if( isdigit(item) || isalpha(item))
                {
                        postfix_exp[j] = item;
                        j++;
                }
                else if(is_operator(item) == 1)
                {
                        x=pop();
                        while(is_operator(x) == 1 && precedence(x)>= precedence(item))
                        {
                                postfix_exp[j] = x;
                                j++;
                                x = pop();
                        }
                        push(x);
                        push(item);
                }
                else if(item == ')')
                {
                        x = pop();
                        while(x != '(')
                        {
                                postfix_exp[j] = x;
                                j++;
                                x = pop();
                        }
```

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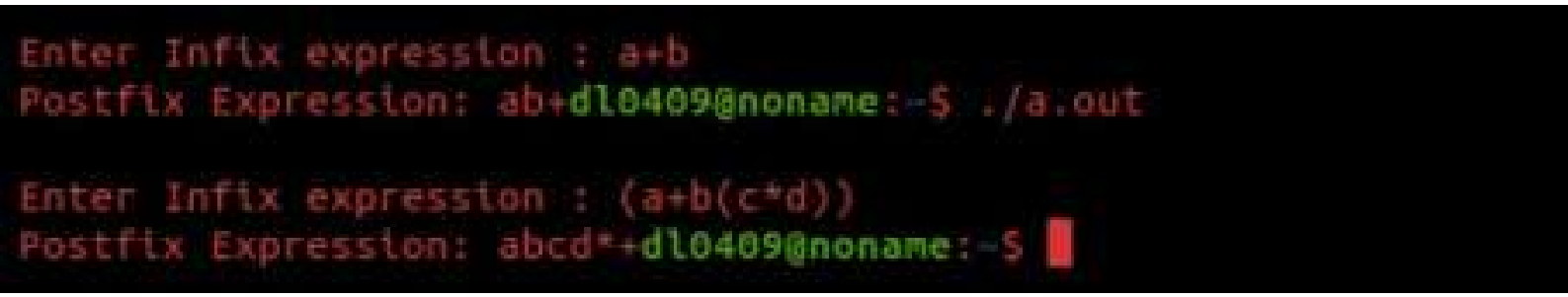
```
                push(item);
        }
        else if(item == ')')
        {
                x = pop();
                while(x != '(')
                {
                        postfix_exp[j] = x;
                        j++;
                        x = pop();
                }
        }
        else
        {
                printf("\nInvalid infix Expression.\n");
                getchar();
                exit(1);
        }
        i++;
        item = infix_exp[i];
    }
    if(top>0)
    {
            printf("\nInvalid infix Expression.\n");
            getchar();
            exit(1);
    }

    postfix_exp[j] = '\0';
}

int main(){
    char infix[SIZE], postfix[SIZE];

    printf("\n Enter Infix expression : ");
    scanf("%s",infix);

    InfixToPostfix(infix,postfix);
    printf(" Postfix Expression: ");
    printf("%s",postfix);

    return 0;
}
```


Enter Infix expression : a+b
Postfix Expression: ab+dl0409@noname:~$ ./a.out
Enter Infix expression : (a+b(c*d))
Postfix Expression: abcd*+dl0409@noname:~$