

```

#include <stdio.h>
#include <stdlib.h>
typedef struct s_op
{
    int status;
    int ans;
} t_op;

int stack[256];
int pointer = -1;

int pop()
{
    return stack[pointer--];
}

void push(int num)
{
    stack[++pointer] = num;
}

int isemp()
{
    return pointer == -1;
}

int isspc(char c)
{
    return c == ' ' || c == '\t' || c == '\r'
        || c == '\f' || c == '\n' || c == '\v';
}

int isdig(char c)
{
    return (c >= '0' && c <= '9');
}

int isop(char c)
{
    return c == '*' || c == '/' || c == '+'
        || c == '-' || c == '%';
}

```

```

t_op *doop(char op)
{
    t_op *res = malloc(sizeof(t_op));
    res->status = 1;
    int num1;
    int num2;
    if (!isemp())
        num1 = pop();
    else
    {
        res->status = 0;
        return (res);
    }
    if (!isemp())
        num2 = pop();
    else
    {
        res->status = 0;
        return (res);
    }

    if (op == '+')
        res->ans = num1 + num2;
    else if (op == '-')
        res->ans = num2 - num1;
    else if (op == '*')
        res->ans = num1 * num2;
    else if (op == '/')
    {
        if (num1 == 0)
            res->status = 0;
        else
            res->ans = num2 / num1;
    }
    else
    {
        if (num1 == 0)
            res->status = 0;
        else
            res->ans = num2 % num1;
    }
    return res;
}

```

```

int calc(char *equ)
{
    int i = 0;
    t_op *res;
    while(equ[i])
    {
        while (isspc(equ[i]))
            i++;
        if (isop(equ[i]) && (!equ[i + 1] || isspc(equ[i + 1])))
        {
            res = doop(equ[i]);
            if (res->status == 0)
                return 0;
            else
                push(res->ans);
        }
        while (isspc(equ[i]))
            i++;
        if (isdig(equ[i]) || (equ[i] == '-' && isdig(equ[i + 1])))
        {
            push(atoi(equ + i));
            if (equ[i] == '-')
                i++;
        }
        while (isdig(equ[i]))
            i++;
        i++;
    }
    int ans = pop();
    if (isemp())
        printf("%d\n", ans);
    else
        return (0);
    return (1);
}

int main(int ac, char **av)
{
    if (ac != 2)
    {
        printf("Error\n");
        return (0);
    }
    else
    {
        if (!calc(av[1]))
            printf("Error\n");
    }
    return (0);
}

```