

bottom to the top.

**Note:** You must use linked list; otherwise, no points will be given.

## Test Case

Please test your program with Input, and then check the answers with Output.

Listing 4 : Implement a stack by using a linked list

```
1 Input :
2 Push 2
3 Push 6
4 Push 8
5 Pop
6 Push 83
7 Push 33
8 Push 17
9 Pop
10 Pop
11 Push 13
12 Push 25
13 Pop
14
15 Output :
16 4
17 2 6 83 13
```

## 5. Structure and array

Please implement a structure array <name, day, score, area>, read the input file, and store the test data in an array for statistical analysis. The data in the input file (illustrated in the following table) was collected from night markets and a data tuple consists of name, opening hours, evaluation, and area columns. The maximum number of night markets is 10. After reading the file, according to the following three questions, output the questions and their answers as shown in List 5.

Name	Opening hours	Evaluation ★	Area
花園夜市	四、六、日	5	台南市
大東夜市	一、二、五	4	台南市

武聖夜市	三、六	4	台南市
民雄夜市	一	2	嘉義縣
東石夜市	二	3	嘉義縣
士林夜市	每日	3	台北市
公館夜市	每日	3	台北市
師大夜市	每日	4	台北市
逢甲夜市	每日	3	台中市
大甲夜市	四	2	台中市

**Note:** You must use an array and struct; otherwise, no points will be given.

## Test Case

Please test your program with Input and, and then check the answers with Output.

Listing 5: Structure and array

```

1 Input :
2 花園夜市,467,5,台南市
3 大東夜市,125,4,台南市
4 武聖夜市,36,4,台南市
5 民雄夜市,1,2,嘉義縣
6 東石夜市,2,3,嘉義縣
7 士林夜市,1234567,3,台北市
8 公館夜市,123567,3,台北市
9 師大夜市,1234567,4,台北市
10 逢甲夜市,1234567,3,台中市
11 大甲夜市,4,2,台中市
12 Output :
13 評價最高的夜市：花園夜市
14 星期三有開的夜市：武聖夜市、士林夜市、公館夜市、師大夜市、逢甲
    夜市
15 台中的夜市：逢甲夜市、大甲夜市

```

## 6. Infix to Postfix Conversion

Please finish a program which can change the expression from the infix form to the postfix form in C using a stack. The input operands are lowercase letters 「a」 to 「z」; meanwhile, the input operators are 「\*」, 「/」, 「+」, and 「-」. Furthermore, the precedence of the operators is 「\*」=「/」>「+」=「-」. The output includes two lines of the results: (1) the postfix expression, and (2) the maximum number of elements in