

Question 1. (10 points) Anty has written the following program to read characters from the input and count the number of **lower case**, **upper case**, and **other** characters. The program reads **up to 10 characters** until a **.** (**DOT**) is encountered, and print the counts. **DOT** is also counted as **other** character.

```
1 #include <stdio.h>
2 int main()
3 {
4     int cUpper, cLower, cOther;
5     char ch;
6     int k = 1;
7
8     while (k < 10) {
9
10        k++;
11
12        scanf("%c", ch); // read the next char
13
14        if (('a' <= ch) && ('z' >= ch)) {
15            cLower = cLower + 1;
16            continue;
17        }
18
19        if (('A' <= ch) && ('Z' >= ch)) {
20            cUpper = cUpper + 1;
21            continue;
22        }
23
24        cOther = cOther + 1;
25
26        if (ch == '.') {
27            break;
28        }
29
30    }
31
32    /* output the result */
33    printf("Lower = %d, Upper = %d, Other = %d\n",
34           cLower, cUpper, cOther);
35
36    return 0;
37 }
```

When run with certain inputs, the program produces unexpected results, as given in this table:

INPUT	OUTPUT
IITKapur.	Lower = -2144426575, Upper = 2, Other = 1
iitK**.	Lower = 44, Upper = 2567, Other = 21

You have to give **minimum** number of changes required to fix the program, in the space below.

Line#	Change