Name: Section: Rollno:

Minor Quiz 2 **Pages: 2** **Duration: 15 minutes**

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 = 0;
7
8     do {
9         scanf("%c", ch); // read the next char
10
11        if (('a' <= ch) && ('z' >= ch)) {
12            cLower = cLower + 1;
13            k++;
14            continue;
15        }
16
17        if (('A' <= ch) && ('Z' >= ch)) {
18            cUpper = cUpper + 1;
19            k++;
20            continue;
21        }
22
23        cOther = cOther + 1;
24        k++;
25
26        if (ch = '.') {
27            break;
28        }
29
30    } while (k <= 10);
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
esc101.iit	Lower = -2144426575, Upper = 2, Other = 1
$Student.	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**