

[15 marks] There are **4 lines containing logical errors** (1 mark for each correctly identified line and 1 mark for correctly fixing each error). **Record your answer in Blackboard (line# : type entire line correction)**

BELOW CODE OUTPUTS THIS: (FIX IT!!)

```
Enter a string: C Programming IPC 144
C Programming IPC 144
Vowels: 3 Consonants: 0 Other: 18
```

THIS IS WHAT IT SHOULD OUTPUT:

```
Enter a string: C Programming IPC 144
441 ++I ++i++a++o++ +
Vowels: 4 Consonants: 11 Other: 6
```

```
01 #include <stdio.h>
02 #include <string.h>
03 #include <ctype.h>
04
05 #define SIZE 30
06
07 void extract(char c, int* count1, int *count2, int* count3)
08 {
09     if ((c == ' ' && !isdigit(c)) || isalpha(c))
10     {
11         putchar(c);
12         (*count3)++;
13     }
13     else if((c != 'a' && c != 'A' && c != 'e' && c != 'E' && c != 'i' &&
14             c != 'I' && c != 'o' && c != 'O' && c != 'u' && c != 'U') || isdigit(c))
15     {
16         putchar(c);
17         (*count1)++;
18     }
19     else
20     {
21         putchar('+');
22         (*count2)++;
23     }
24 }
25
26 void extractDetails(char* str, int* count1, int* count2, int* count3)
27 {
28     int i, len = str == NULL ? 0 : strlen(str);
29
30     for (i = 0; i < len; i++)
31     {
32         extract(str[i], count1, count2, count3);
33     }
34 }
35
36 int main(void)
37 {
38     int vowels = 0, consonants = 0, other = 0;
39     char input[SIZE + 1] = { 0 };
40
41     printf("Enter a string: ");
42     scanf("%30[^\n]", input);
43     extractDetails(input, &vowels, &consonants, &other);
44     printf("\nVowels: %d Consonants: %d Other: %d\n", vowels, consonants, other);
45
46     return 0;
47 }
```