

Practical 2 : Program to count digits, vowels and symbols in C.

```
#include <stdio.h>
#include <ctype.h>

int main() {
    char str[200];
    int i, digits = 0, vowels = 0, consonants = 0, symbols = 0;

    printf("Enter a string: ");
    gets(str); // Note: gets() is unsafe; use fgets() in modern compilers.

    for (i = 0; str[i] != '\0'; i++) {

        if (isdigit(str[i])) {
            digits++;
        }
        else if (isalpha(str[i])) { // check if letter
            char ch = tolower(str[i]);
            if (ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u')
                vowels++;
            else
                consonants++;
        }
        else {
            symbols++; // spaces, punctuation, special characters
        }
    }

    printf("\nDigits: %d", digits);
    printf("\nVowels: %d", vowels);
```

```
printf("\nConsonants: %d", consonants);
printf("\nSymbols: %d\n", symbols);

return 0;
}
```

Hello123@!

Digits: 3

Vowels: 2

Consonants: 3

Symbols: 2