

1. Write a C++ Program to accept a line of text and count the number of words, characters and digits in it.

```
#include <iostream>
#include <string>
#include <cctype>

using namespace std;

int main()
{
char line[100];
    int wordCount = 0, charCount = 0, digitCount = 0;

    cout << "Enter a line of text: ";
    gets( line);

    for (int i = 0; i < strlen(line); i++)
    {
        if (isalpha(line[i]))
        {
            charCount++;
        }
        else if (isdigit(line[i]))
        {
            digitCount++;
        }

        if (isspace(line[i]) && !isspace(line[i-1]))
        {
            wordCount++;
        }
    }
```

```
// count the last word if it exists
if (!isspace(line[line.length()-1]))
{
wordCount++;
}

cout << "Word count: " << wordCount
<< endl; cout << "Character count: " <<
charCount << endl; cout << "Digit count:
" << digitCount << endl;

return 0;
}
```