**Exercises**

Consider the following problems we worked on in the previous tutorial and perform the following task:

* write the main algorithm in ADL;
* implement each abstraction in ADL as a function or procedure where appropriate.

1. Enter two numbers from the keyboard, number1 and number2. Then divide number1 by number2 and display quotient and remainder. Note that decimal division is not allowed. Hence, you are required to calculate the quotient and remainder. When designing your algorithm, you need to assume that

* number1 ≥ number 2
* number2 != zero
* both number1 and number2 are positive

1. Enter a number of characters from keyboard (e.g. "1", "r", "£", "!"), and after each entry, work out whether it is a digit, letter of the alphabet, punctuation character or special characters (e.g. "%", "&") and increment an appropriate counter (e.g. digit counter or letter counter). The entry process will terminate when the "#" symbol is entered. After the "#" symbol is entered, print the total numbers of each different character.