# 2. Separate the Files

Consider a text file that contains a list of C, C++, and C# source code file names. The extensions for the file types are as follows:

1.  $C \rightarrow .c$ 2.  $C++ \rightarrow .cpp$ 3.  $C\# \rightarrow .cs$ 

Given a string, baseFilename, that denotes the name of a real text file,

**create the following three output files** where *baseFilename* denotes the name of the file received as input and the base of the names for output files:

- 1. *c\_baseFilename*, for storing *C* file names.
- 2. cpp baseFilename, for storing C++ file names.
- 3. *cs\_baseFilename*, for storing *C*# file names.

Next, process the list of file names in *baseFilename* in order and, for each source code file name encountered, append its name to the appropriate output file.

For example, the input *baseFilename* is *file\_00.txt* and it contains the following data:

first.c
first.cpp
first.cs
second.c

First, create the three files named *c\_file\_00.txt*, *cpp\_file\_00.txt* and *cs\_file\_00.txt*. Read in each source file name and write them out to their appropriate files. The results are:

c\_file\_00.txtfirst.c second.ccpp file 00.txt

first.cpp

• cs\_file\_00.txt

first.cs

The file names must maintain the order in which they were listed in *file 00.txt*.

Note: There may not be a file of every type included in

the input. In that case, the output file for that type should still be created and it should be empty.

#### **Function Description**

Complete the code in the editor below. It must create three files and save the appropriate source file names to each one while maintaining order.

The program has the following parameter(s):

baseFilename: the name of a text file

#### **Constraints**

• baseFilename has a maximum of  $10^5$  lines.

**Input Format for Custom Testing** 

Input from stdin will be processed as follows and passed to the function.

The only line contains the name of a text file to read, baseFilename.

Sample Case 0

#### Sample Input 0

names\_list\_00.txt

### Sample Output 0

Create the following three output files:

```
c_names_list_00.txt:
code1.c
code3.c
code4.c
cpp_names_list_00.txt:
code1.cpp
code5.cpp
cs_names_list_00.txt:
code1.cs
code2.cs
```

## **Explanation 0**

The content of the text file names list 00.txt is:

```
code1.c
code1.cs
code2.cs
code3.c
code4.c
code5.cpp
```

Observe that each source code file name in the input file was put into the output file corresponding to its language, and the order of the source code file names is maintained.