

Skip-Line Software Engineer Coding Interview Questions

Complete the following coding tasks in C or C++. You may use any IDE, text editor, or an online environment of your choice. You are allowed to use Google, StackOverflow, API documentation for your chosen language, and other internet resources as needed, noting what resources have been used and when.

1. Write a function named "SkipLine" that takes a single integer parameter, n, and prints the numbers 1 to n (including n). Each number should be printed on a separate line. If the number is evenly divisible by 4, print "Skip" instead of the number. If the number is evenly divisible by 9, print "Line" instead of the number. If the number is evenly divisible by both 4 and 9, print "SkipLine" instead of the number.

Test Output: Call the function using n = 100

2. In the folder containing this document is another folder called languageFiles. There are several files in this folder:

- master_enum.json
- lang_en-us.json
- lang_fr.json
- lang_es.json
- lang_de.json

master_enum.json is a JSON array of screens. Each screen has a name and array of **enums**. Each enum in the array contains several fields, such as name and description. The **lang_*.json** files are arrays of items where the **enum** field for an item should match the **name** of an enum object in **master_enum.json**. However, there's been a problem. Something went wrong, and some items are missing from each language file.

Write a program that checks each language file against **master_enum.json** and outputs a list of all missing items. The output should contain a line for each missing item, where each line lists the enum name, the screen it belongs to, and the language file from which it's missing, all separated by tabs. See the sample output below. The output does not need to be sorted in any way. You **are** allowed to use an external C or C++ JSON library to help solve this problem; you do not need to solve it by hand.

You can assume the following:

- All files contain valid JSON
- The master enum file is NOT missing any objects

== Sample Output ==

```
BoxLeftText      Misc Strings      (lang_en-us.json)
PaintColorYellowText  Gun Setup Screen      (lang_en-us.json)
PaintColorYellowText  Gun Setup Screen      (lang_es.json)
AboutLabelText    Help Screens      (lang_fr.json)
```