

Coding Challenge

The Marvel Comics API allows developers to access information about Marvel's vast library of comics.

We want you to use the Marvel API (see http://developer.marvel.com) to generate the following reports:

Part One:

- 1. A list of all characters in alphabetical order.
- 2. The top 10 most popular characters; popularity being measured by how many comics the character appears in.

Part Two:

A character is considered to have "high influence" in the Marvel Universe if they appear in the same comics as other characters (co-occurrence). Based on this, select the 10 individual characters with the greatest influence.

a. Hint: You may want to consider the influence of the characters that a character co-occurs with.

Part Three:

You are a **Supervillan** in the Marvel Universe, and you have created an evil plan to kill as many of the characters in the Universe as possible. In order to do this, you've secured a highly contagious and quite deadly virus. However; you only have enough of the virus to infect ten characters. **Which ten characters do you choose to infect, in order to inflict the most widespread deaths across the whole Marvel Universe?**



You'll need to sign up for a developer API key at http://developer.marvel.com (free). Once you have a key then the API documentation is at http://developer.marvel.com/docs

Note: we're looking for a command line tool with the "reports" just being written to stdout.

On Completion

Also write instructions on how you:

- install any dependencies your code requires
- how we compile and run your code

Constraints

• Use of third party libraries is ok; in the coding interview we'll be asking you about your choices

Guidance

• Build a data scraper to build a local cache of the data you need as one component then a reporting component, so you can run these independently.