

PL190μ Introduction to the Go Programming Language

Mission 3: C to Go translation

This assessment evaluates the following competencies:

- *GP001 – Correctly use the syntax of Go programming* (+1)
- *GP101 – Write, compile and execute a single source file Go program with the command line* (+1)

You may also be assessed on the following competencies:

- *GP002 – Use basic built-in data structure: array, slice and map* (+1)
- *GP003 – Manipulate structures and define methods manipulating them* (+1)
- *GP301 – Handle rigorously the errors when calling procedure and function* (+1)
- *GP004 – Use functions from the Go standard library given their specification* (+2)

In this mission, you have to rewrite a small C program with Go, using all the basic constructs from this course and possibly the functions from the Go standard library. To succeed the mission, you have to:

1. Find and select a small C program on Gist¹ with about between 30 and 50 lines of code²
2. Write a Go program doing exactly the same thing that the C program you selected.
3. Show the teacher your program and explain how you translated it.

Note that, depending on the C program you selected, you may be assessed on more competencies, depending on what constructs from the Go programming language you used. Also, write good Go code, do not make your program more complex than needed, just to use some Go features.

¹Gist is available here: <https://gist.github.com>, and you can filter by language when doing a search with “filename:.c”.

²Here is an acceptable example: <https://gist.github.com/hindhujaindu/746e43828ad8b014517341238351bbbb>.