

Road to Mercari Gopher Dojo module 00

Summary: This document is the subject for the Gopher Dojo module 00 of the Road to Mercari @ 42 Tokyo.

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Chapter I

Instructions

- Only this page will serve as reference; do not trust rumors.
- Watch out! This document could potentially change up to an hour before submission.
- These exercises are carefully laid out by order of difficulty from easiest to hardest. We will not take into account a successfully completed harder exercise if an easier one is not perfectly functional.
- Make sure you have the appropriate permissions on your files and directories.
- You have to follow the submission procedures for every exercise.
- Your exercises will be checked and graded by your fellow classmates.
- You <u>cannot</u> leave <u>any</u> additional file in your directory than those specified in the subject.
- Got a question? Ask your peer on the right. Otherwise, try your peer on the left.
- Your reference guide is called Google / man / the Internet /
- Examine the examples thoroughly. They could very well call for details that are not explicitly mentioned in the subject...
- If no other explicit information is displayed, you must assume the following versions of languages: Go 1.16.3.

Chapter II Foreword https://gopherdojo.org/ 3

Chapter III

Exercise 00: Image conversion command

5	Exercise 00	
	jpg -> png	
Turn-in directory : $ex00/$		
Files to turn in : *		

Create an image conversion command that meets the following specifications.

- To convert JPG files in a specified directory (including subdirectories) to PNG.
- The directory should be taken from the command line arguments.
- Refer to the example and make sure you get the same output.

Example

```
?> go mod tidy
   go build
?> ./convert
error: invalid argument
?> ./convert nosuchdirectory
error: nosuchdirectory: no such file or directory
?> ls -1 images
42tokyo_logo.jpg
profile_photo.jpg
?> ./convert images
?> ls -1 images
42tokyo_logo.jpg
42tokyo_logo.png
profile_photo.jpg
profile_photo.png
?> echo 'aaa' > images/test.txt
?> ls -1 images
42tokyo_logo.jpg
42tokyo_logo.png
profile_photo.jpg
profile_photo.png
test.txt
?> ./convert images
error: images/test.txt is not a valid file
```

• Your package should be separated from the main package.

- Use only self-created packages, standard packages, and semi-standard packages. (Semi-standard packages: packages under golang.org/x)
- Create a user-defined type.
- Create a GoDoc.
- Use Go Modules.

Chapter IV

Exercise 00: Bonus

	Exercise 00	
/	? -> ?	
Turn-in directory: $ex00/$		
Files to turn in : *		/

Add the following functions to the image conversion command created in the previous question.

• Implement a feature which enable to specify the image format before and after conversion.

Example

```
?> ls -1 images
42tokyo_logo.png
profile_photo.png
?> ./convert -i=png -o=jpg images
?> ls -1 images
42tokyo_logo.jpg
42tokyo_logo.png
profile_photo.jpg
profile_photo.png
```

• Add other useful feature.