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.

Contents

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 cannot leave any 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/

Chapter III

Exercise 00 : Image conversion command

	Exercise 00
	jpg -> png
Turn-in directory : *ex00/*	
Files to turn in : *	
Allowed packages : `self-created packages, standard packages, semi-standard packages`	

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 : ∗	
Allowed packages : ∗	

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.