

CSE314 Bash Scripting Online - Section B

May 04, 2025

Photo Album Curator

Time: 35 minutes

Overview

As a travel blogger, you've returned from a trip with a collection of photos stored in the `photos/` directory. Each photo is named in the format `IMG_YYYYMMDD_HHMMSS.jpg`, indicating the date and time the photo was taken.

Your task is to organize these photos based on the time of day they were taken.

Objectives

1. Scan the `photos/` directory for files matching the pattern `IMG_*.jpg`.
2. For each file:
 - Extract the hour from the filename.
 - Categorize the photo into:
 - **Morning:** 00–11 hours string to int
 - **Afternoon:** 12–17 hours
 - **Evening:** 18–23 hours
 - Move the photo into the corresponding subdirectory (`morning/`, `afternoon/`, or `evening/`).
 - Rename the photo by prefixing it with the category (e.g., `morning_IMG_20250501_074512.jpg`).
3. Generate a `counts.txt` file listing the number of photos in each category.

Sample Directory Structure

```
■ photos/
  ■ morning/
    ■ morning.JPG_20250501_074512.jpg
  ■ afternoon/
    ■ afternoon.JPG_20250501_124512.jpg
  ■ evening/
    ■ evening.JPG_20250501_184512.jpg
  ■ counts.txt
```

Instructions

- Use only Bash built-in commands and standard Unix utilities.
- Include comments in your script to explain your logic.

Submission Guidelines

Important Notes

- Please note that any usage of the internet is strictly prohibited during the assignment.
- Use of any unfair means will be duly punished.
- Submit the source code in Moodle. Failure to submit in Moodle will result in a mark deduction.
- The filename should be `online-StudentID.sh` (e.g., `online-2105XXX.sh`).
- Make sure your script is executable.