

Homework 1

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Group 1 - 3



Categorizing by type

Your task is to create a script that organizes files by their type into different directories. The homework is divided into two parts:

Part1: File Creation Script

create bash file that takes only three parameters:

1. Directory: The location where files will be created.
2. Number of Files: The total files to create.
3. Number of Types: The variety of file types.

Utilize the touch command to create files with various types and names.

Implement \$RANDOM%\$3 to randomly select file types, using conditions to determine the file extension.

Feel free to use any file type extensions, even if they are not real.

- **touch**: The touch command is primarily used to **create a new empty file**. It can also update the timestamp of an existing file without modifying its contents. For example, touch new_file.txt creates an empty file named 'new_file.txt'

Part2: File Sorting Script

create another bash file that takes only four parameters:

1. Output Directory: The destination for sorted files.
2. Input Directory: The source directory containing unsorted files.
3. Number of Files: The total files to sort.
4. Number of Types: The variety of file types.

Call and execute the first script from Part 1 with the required parameters.

Capture the output of the first script in a variable. If it returns 0, proceed; otherwise, exit the script.

Use the echo command to return values from your script.

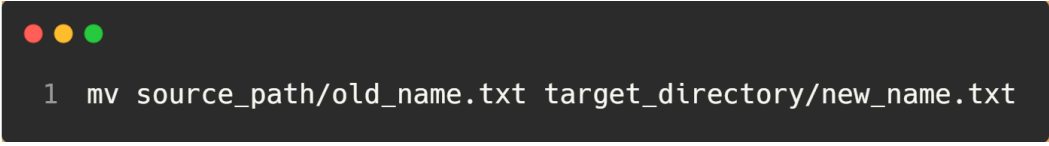
In the output directory, create a folder for each file type.

Iterate through all files and move them from the input directory to the corresponding folder in the output directory using regex operations.

Commands:

- **mv**: This command stands for **move**, and it's used to **rename or move files and directories** from one location to another. For example,

renames the file 'old_name.txt' to 'new_name.txt', and `mv file.txt /path/to/directory/` moves 'file.txt' to the specified directory.



```
1 mv source_path/old_name.txt target_directory/new_name.txt
```

- **mkdir**: This command is used to **create a new directory**. For example, `mkdir new_folder` creates a new directory named 'new_folder'.



```
1 mkdir output_directory/new_folder
```

*Hint: Handle errors in parameters using echo and exit commands to terminate the script if necessary.

Viel Glück