

Project #3 [65 points]

Due date is Tuesday, 3/21/2019.

- A. [20 points] Write a script named **listEmptyDir.sh** that will do the following: (a) take a name of a directory as a parameter; (b) loop through all files in this directory and display their names; (c) if a file is a directory and has no files in it (empty directory), add the name of this empty directory to the file **EmptyDir.txt** in your current directory. If the number of parameters is not 1 or a parameter is not a directory, display the “usage” message and exit with non-zero status. Your file for submission should demonstrate that you have investigated all possible situations.
- B. [25 points] Transform a script **contact_one.sh** (sec. 5.2) so that instead of using a file with names it will use a HERE document (it may include the same information as the file **myContactlist**). Another change is that instead of using a positional parameter you read a pattern from a user (don’t forget about a prompt). Include a command **grep** into a **while** or **until** loop providing different input strings. If a name is not in HERE document, display a message saying that.

A HERE document is a way to add input to a script easily. It is described in section 5.17 of our textbook, page 144 in my copy. I have uploaded a copy of **contact_one.sh**

- C. [20 points] For this part, include a text document with the regular expressions for some sed calls that would do the following tasks:
- 1) Remove any uppercase or lowercase version of my initials (MWH) from a document and replace them with MRH.
 - 2) Write a regular expression that would match any file in ending in .jpg
 - 2a) Using the above regular expression, use sed to replace that extension with the extension .jpeg
 - 3) Give a sed command that would output every line in a file that did not start with the letter ‘a’ and do not end with .html
 - 4) Write a line in sed to find all phone numbers that look like 1234567890 with (123)456-7890