

Practical exercise 2a: Scripting (Part 1)

A- Documentation

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B- practical exercises

1- Write a script called **crdir.ps1** that:

- Firstly, it checks if a directory, whose name has been provided by the user as a first parameter when the script was run, exists or not.
- Secondly, if the directory does not exist, **crdir.ps1** will create the directory and the following message: "A new folder called <folder_name> has been created". If the directory exists **crdir.ps1** will display the message: "The folder <folder_name> already exists". Note that The script should display the folder name provided by the user as a first parameter instead of <folder_name>.
- Thirdly, it checks if a file, whose name has been provided by the user as a second parameter when the script was run, exists or not.
- Fourthly, if the file does not exist, **crdir.ps1** will create the file and the following message: "A new file called <file_name> has been created". If the directory exists **crdir.ps1** will display the message: "The file <file_name> already exists". Note that The script should display the file name provided by the user as a second parameter instead of <file_name>.
- Finally, the script terminates returning an exist code equal to 0.

2- Modify **crdir.ps1** and write a script called **crdir2.ps1** that:

- Add date and time to the folder name when the new folder is created
- Add date and time to the file name when the new file is created
- Show the contents of the new folder
- Finally, the script terminates returning an exist code equal to 0.

3- Write a script called **zip.ps1** that:

- Firstly, it checks if a directory, whose name has been provided by the user as a first parameter when the script was run, exists or not.
- Secondly, if the directory does not exist, **zip.ps1** will create the directory. Afterwards, the script will change to the new directory.
- Thirdly, it checks if another directory, whose name has been provided by the user as a second parameter when the script was run, exists or not. If the second directory does not exist, the script terminates returning an exist code equal to 1.
- Fourthly, if the second directory exists, **zip.ps1** copy alls files with an extension provided by the user as a third parameter from the second directory to the first directory.
- Fifthly, the files are compressed in one single .zip file. The .zip file name has been provided by the user as a fourth parameter.
- Finally, the script terminates returning an exist code equal to 0.

4- Modify **zip.ps1** and write a script called **zip.ps2** that:

- Asks for the user's age.
- If the user's age is greater or equal to 18 the rest of the script is executed.
- If the user's age is less than 18, the script displays "This script can be run only by adults (age>=18)" and it terminates returning an exist code equal to 1.

5- Write a script called **game.ps1** that implements the rock-paper-scissors game:

- Firstly, the script randomly select one among these 3 options: rock, paper or scissors. The script does not show the result.
- Secondly, the script asks the user to select one option: rock, paper or scissors.
- Thirdly, if the option selected by the system is equal to the option selected by the user, the script displays "Game tied" and it terminates returning an exist code equal to 2.
- If user selects "scissors" and computer "paper" the script displays "You have won the game" and it terminates returning an exist code equal to 0. But if computer has selected "rock" the script will display "You have lost the game" and it terminates returning an exist code equal to 0.
- If user selects "paper" and computer "rock" the script displays "You have won the game" and it terminates returning an exist code equal to 0. But if computer has selected "scissors" the script will display "You have lost the game" and it terminates returning an exist code equal to 0.
- If user selects "rock" and computer "scissors" the script displays "You have won the game" and it terminates returning an exist code equal to 0. But if computer has selected "paper" the script will display "You have lost the game" and it terminates returning an exist code equal to 0.

HELP: [Get-Random \(Example 8\)](#)

6- Write a script called **unzip.ps1** that:

- Firstly, asks for the URL of a file server where .zip files can be downloaded from.
- Secondly, asks for the directory path on the file server where the .zip files can be found
- Thirdly, asks for a .zip file name on the file server.
- Fourthly, the script checks if a .zip file with the file name provided in the 3rd step exists or not on the current directory. If the file .zip exists, the script displays "The file <file_name.zip> already exists" and it terminates returning an exist code equal to 1.
- Fifthly, if the file .zip does not exist, it merges URL, directory path and filename into a single string.
- Sixthly, the script downloads the .zip file on the current directory.
- Seventhly, the .zip will be expanded
- Eighthly, the script will display the contents of the current directory.
- Finally, the script terminates returning an exist code equal to 0.

C) General Conditions

1- Deadline: 29-4-2022 - From 15:55 to 16:10

2- Send your scripts attached to an e-mail with the following specifications:

- E-mail address: **cf(at)collados.org**
- Subject:
 - ASIX1 (English): **asix1_surname_name_m01tu03pr2a**
 - DAW1 (English): **daw1_surname_name_m01tu03pr2a**