# Overview

## Goals

Scripts are a powerful way to automate repetitive or complex tasks. They allow for more efficient and error free implantation of new services and configurations.

This is the conclusion of Lab 02.

## Deliverables

* Lab Report with the following
  + Documented results of running each script
    - Include copy of the script text
      * Put in text box
      * Monospace font
    - Screen captures are not allowed for text items
  + Copies of scripts in Moodle

## Writing Your Own Scripts (20pts)

### Improve addpermplus.sh from Lab 02

Add checks

* the first argument value is only u, g, o or a
* the second argument value is only r, w, or x
* the third argument is a valid name
  + What do you need to check for?
  + Justify your choice.

Be sure to issue meaningful errors.

Test your script and document the results.

### Create new accounts

Your script will add new users from a file. The origin of the data will be an Excel (or equivalent) spreadsheet. The spreadsheed data can be easily be exported as a specially formatted text file called a CSV (comma separated variables) file. Normal capitalization will be used. Your delimiter is the same as one produced by making a CSV file from an Excel spreadsheet (or equivalent). Your script will read the exported csv file, change all upper case letters to lower case and form a userid with the following algorith: the userid is to use up to the first 6 chars of the last name concatinated with the first 2 chars of the first name. You can use the **adduser** or **useradd** functions to create the acccounts. Generate a random password that will be recorded and sent to the user. Use any method you want to generate the random pw. Make sure the user has a home directory the same as their userid.

Document your code and the successful testing of it. Use a real spreadsheet to hold the users name in the following format:

|  |  |
| --- | --- |
| fname | lname |
| Tony | Kombol |
| Fred | Ziffle |
| Darren | Kitchen |
| Shannon | Morse |

Create your own table with your own names in them. Have at least 10 entries. One way to document the generated id and the pw would be to create a csv file with the users name, id and pw. Then it could be easily read as text or with a spreadsheet.

You can use a combination of sed, bash script, awk, whatever to automate the task.

# Deliverables:

1. Document the above work in a printed report
   1. Listing of scripts
   2. Listing showing scripts working
      1. Accepting proper data
      2. Rejecting improper data
2. Moodle
   1. Upload a copy of your programs to Moodle
   2. Upload a copy of your report