

LAB 2 - Shell Scripting

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Introduction

A shell is a program that interprets the commands that a user types and executes specified programs. There are various types of shells and scripting languages for them. In this lab we will be introduced to bash scripting.

The basic idea of bash scripting is to write a (hopefully) reusable script that does a task that can be performed using a shell manually but requires many steps. One example of this is writing test scripts to test the output of a program based on various input, another would be a script to backup a directory whenever a change is detected.

Bash Tutorial

The first step for this lab will be to learn the basics of shell scripting so that we can see the differences between writing a script and what else we've programmed so far. **With that in mind please work through the tutorial [here](#) before continuing with the project. Please anticipate spending around 1 hour working these examples. Working through this tutorial will save you a significant amount of time on the project as the examples will be applicable to the project.**

Regex Tutorial

Another important topic to cover is an explanation of regular expressions which will be vital to completing the first half of the project. This regex introduction should take roughly 20 minutes and will introduce all the concepts necessary to complete the first half of the project. **Please see [this page](#) for the regular expression tutorial.**

Project Instructions: Part 1

For the first half of this project you will be writing a script that will test password strength. You will check a password passed to the script as an argument in a file(the password will be the only line in the file) against regex patterns to see if the password contains a match to the patterns we are looking for. You will then add or subtract points from the password's "score" and output that as the result. The amount of points to add