RMIT University
School of Science
COSC2110/COSC2111 Data Mining
Laboratory Week 7

Aims of this lab

- Learn how to develop and run a unix bash script

The files for this lab can be found in the folder
`/KDrive/SEH/SCSIT/Students/Courses/COSC2111/DataMining/`
`/code-and-scripts/parking-time.sh`
`/data/parking-small.csv`

1. Using PUTTY with X11 forwarding, open up a bash window to `jupiter.csit.rmit.edu.au` and log in. You can find detailed instructions in the Canvas shell in the basic unix guide or in the first part of the recording of lecture 6.
2. If you haven't already done so make a folder on HDrive for Data Mining, eg,
   ```
   cd HDrive
   mkdir DM
   cd DM
   ```
3. Copy in the two files above: [Note: If you are cutting and pasting from a pdf of this file, be aware that the ~ character might not be cut out properly]
   ```
   cd /KDrive/SEH/SCSIT/Students/Courses/COSC2111/DataMining
   cd code-and-scripts
   cp parking-time.sh ~/HDrive/DM
   cd ../data
   cp parking-small.csv ~/HDrive/DM
   ```
4. Navigate to your DM folder on the HDrive
   ```
   cd
   ls
   cd HDrive
   ls
   cd DM
   ```
5. Open up parking-time.sh with an editor an inspect it. If you don't know any other editor, try `nano`.
   ```
   nano parking-time.sh
   ```
6. To run the script:
   ```
   sh parking-time.sh
   ```

7. To understand the script, we recommend using two windows, one for the editor and one for running the script. For each `#exit`
   (a) Work out what the code immediately prior is attempting to do.
   (b) Remove the `#` and run the script.
   (c) When it stops verify that the output and the temporary files written are what you expect.
8. To get basic help on any program, use `man`, eg :
   `man paste`
9. Run the script, view the temporary files, look at where they are produced in the script and understand the that code that produces them.
10. Extend the script to generate a new column, "Weekday" in the output file where "yes" indicates a week day and "no" indicates a Saturday or Sunday.