

CS201 Shell Programming Assignment 1

Part I

Write a shell script that adds a user to a password file. The shell should support the following command-line syntax:

```
add <lastName> <firstName> [gid] [uid] [default shell]
```

If gid is not specified, the shell should use the gid of the last user in the password file. If the uid is not specified, the uid should be one more than the uid of the last user in the password file. If the password file is empty, the account will be added with uid=101 and gid=101. The user name can be either <lastname>_<firstname>, or <lastname>_firstInitial (e.g., roussos_conny, or ribler_r). The default shell will be /bin/bash. The add command will use the environment variable PASSWORD_FILE to determine the location of the password file. You should set this variable to the name of a file in your home directory, rather than the actual password file in /etc/passwd. Each new entry to the password file should be recorded in the system logfile (/var/log/messages) using logger.

Part II

Write a shell script that calls the add script that you wrote for Part I repeatedly, once for each line in an addfile. The shell should support the following command-line syntax:

```
addBatch <filename>
```

The input file might have the following entries:

```
Ribler Randy  
Roussos Conny 100 102  
Briggs Will 100  
Lobb Barry 100 105 /bin/tcsh  
Purdy James
```

Part III

Write a shell script that reads a password file and reports occurrences of duplicate UID's, or duplicate user names. The script should report the names and UID's of either type of duplicate entry.

```
findDups <passwordFilename>
```

Sample output:

```
ribler(101) and rlr(101) have the same UID  
roussos(102) and roussos(103) have the same user name
```

