

Scripting Languages: Workshop 4

- To complete the tasks below, you will need a copy of the following files to your current working directory:
 - `foldernames.txt`
 - `staff_sales.csv`
- Ensure that all of the scripts you write are fully commented to clearly explain their functionality at every step

Task 1

1. Write a script named `ws5a.sh` that prompts the user to enter a *three-digit number code* that is greater than or equal to 110 and less than or equal to 150. Ensure that:
 - a. Only a valid integer that meets the above-defined rules is accepted
 - b. Integers that do not meet the above-defined rules; strings; nulls are rejected
2. If the validation fails, the user is to be told that the input is invalid and returned to the prompt to try again
3. This process is to continue until a valid input is made, at which point the user is to be given a message that they have provided a valid input
4. Use a *while* loop for this task
5. If you encounter an error, read the error message printed to the terminal carefully and attempt to resolve the issue and run the `ws5a.sh` script again or ask your tutor for assistance

Task 2

1. Write a script named `ws5b.sh` that populates an array named `newfolders` with the folder names listed in the file named `foldernames.txt` and then only creates those folders for which the folder names contained within the `newfolders` array do **not** exceed 14 characters in length
2. Use a *C-Style* Loop for this task
3. You do **not** need to actually create the folders on your system, just print a message to this effect (see image below)
4. If you encounter an error, read the error message printed to the terminal carefully and attempt to resolve the issue and run the `ws5b.sh` script again or ask your tutor for assistance

foldernames.txt (input)

```
1 humanresources
2 businesssolutions
3 accounting
4 maintenance
5 groundservices
6 motorpool
7 catering
8 managementteam
9 security
10 publicrelations
11 marketingteam
12 foreignaffairs
13 socialclub
14 procurement
15 localgovernment
```

ws5c.sh (output)

```
vbrown@LAPTOP-N6EFE714: /workshops/ws5$ ./ws5c.sh
Folder accounting has been created
Folder maintenance has been created
Folder groundservices has been created
Folder motorpool has been created
Folder catering has been created
Folder managementteam has been created
Folder security has been created
Folder marketingteam has been created
Folder foreignaffairs has been created
Folder socialclub has been created
Folder procurement has been created
```

Task 3

Write a script named `ws5c.sh` calculates the number of sales made by a specified staff member and the total of those sales. The required information is stored within the file named `staff_sales.csv`.

```
vbrown@LAPTOP-4E3P6J7N:~/scr/lang/workshops/ws5$ ./ws5c.sh
[awillis] [dtroy] [grogers] [ibraun] [kmitnick] [mpeters] [psellers] [sellis]

Please enter a username from the list above: awillis
The staff member [awillis] has made [4] sales for a total of [$4291.35]
```

1. Your script should meet the following criteria:
 - a. Read in the required information from `staff_sales.csv` on-the-fly, i.e. no hard-coding
 - b. Present user with a *unique* list of names from the file to make input options clear
 - c. Validate user input to ensure selected staff member exists within the `staff_sales.csv` file
 - d. *Count* all the sales made by the selected staff member
 - e. *Calculate* the total sales amount for the selected staff member
 - f. *Report* results to screen as per the screenshot above
2. If you encounter an error, read the error message printed to the terminal carefully and attempt to resolve the issue and run the `ws5c.sh` script again or ask your tutor for assistance