

Scripting Languages: Workshop 6 (Possible) Solutions

Task 1

1. Using the pre-made script named `ws6a.sh`, add the code required to the function `getsumlines()` that retrieves all lines in a given file that contain monetary sums of \$10,000 or greater and writes these to a file named `results.txt`
2. The input file has been provided and is named `attdata.txt`
3. The function is called in the `ws6a.sh` script as `getsumlines attdata.txt`
4. Do **not** change any of the code in the script outside of the declared function
5. Your function code is working as required when you get the following output to terminal:

```
vbrown@LAPTOP-N6EFE714:~/sl/workshops/ws6$ ./ws6a.sh
The city paid a $600,000 ransom in June 2019 to recover files following a ransomware attack
One paid $75,000 to recover its encrypted files.
Ransomware downtime costs organisations more than $64,000 on average.
Ransomware is costing businesses more than $75,000,000 per year
We have no idea why they didn't just ask for $10,000 flat.
Another study noted that a quarter of businesses would be willing to pay between $20,000 and $50,000 to
```

```
1  #!/bin/bash
2
3  getsumlines() {
4      # Place your function code here
5      grep -E "[$]{1}[0-9]{2,3},[0-9]{3}" $1 > results.txt
6  }
7
8  getsumlines attdata.txt
9
10 cat results.txt
11
12 exit 0
```

Task 2

1. Using the pre-made script named `ws6b.sh`, add the code required to the function `makemenu()` to create a menu from which the user can choose a port number in the `attdata2.csv` file for further analysis (the port numbers are the first column of the `attdata2.csv` file)
2. The input file has been provided and is named `attdata2.csv`
3. The function is called in the `ws6b.sh` script as `makemenu() $selffile` (where `$selffile` is the variable that holds `attdata2.csv`)
4. Do **not** change any of the code in the script outside of the declared function
5. The final output of the script to the terminal will be the port number selected by the user
6. Your function code is working as required when you get the following output to terminal:

```
vbrown@LAPTOP-N6EFE714:~/sl/workshops/ws6$ ./ws6b.sh
What file do you wish to analyse?: attdata2.csv
[23] [6660] [1080] [53] [31337] [22] [161]
Select a port from the list above to analyse: 161
161
```

```
1  #!/bin/bash
2
3  makemenu() {
4      # Place your function code here
5      if ! [ -f portlist.txt ]; then
6          touch portlist.txt
7      fi
8
9      while IFS="," read -r port protocol service ip; do
10         inlist=$(grep $port portlist.txt | wc -l)
11         if [[ $inlist > 0 ]]; then
12             continue
13         else
14             echo -n "$port" " >> portlist.txt
15         fi
16     done < $1
17
18     cat portlist.txt
19     echo ""
20     read -p 'Select a port from the list above to analyse: ' selport
21     echo "$selport"
22 }
```