

Scripting Languages: Workshop 3

Task 1

```
1  #!/bin/bash
2
3  # Write a script named fmaker.sh that prompts the user to provide a name for a directory to be created_
4  |   # _in the current working directory, and then creates that directory
5  # Ensure your script prints a message to the screen that the directory has been created
6  |   # This scripts assumes the dir name provided does not already exist in the current working directory
7
8  read -p 'Enter the name of the directory you want created: ' dirname
9  mkdir $dirname
10 echo "The $dirname directory has been created"
11
12 exit 0
```

Task 2

```
1  #!/bin/bash
2
3  # Write a script named getint.sh that prompts the user for their age as follows_
4  |   # _Please enter your age (enter a integer value only):
5  # Be sure that the (enter a integer value only) part of the statement is on its own line
6  # Once the age has been provided, print a message to this screen that confirms what age has been entered
7
8  echo -e "Please enter your age\n(enter an integer value only):"
9  read userage
10 echo "You have entered $userage as your age"
11
12 exit 0
```

Task 3

```
1  #!/bin/bash
2
3  # Using the command line, create a directory named test2
4  # Write a script named fmaker2.sh that prompts the user to provide a name for a directory_
5  |   # _to be created in the current working directory, and then creates that directory if it does not already exist
6  # If the directory already exists, then print a message that informs the user of this and then exits the script
7  # If the directory does not exist, then create it and print a message that informs the user it has been created_
8  |   # _and then exit the script
9  # Test your script by first entering the existing directory, i.e. test2, and then a directory_
10 |   # _that has not yet been created, e.g. test3
11
12 read -p 'Enter the name of the directory you want created: ' dirname
13
14 if [ -d $dirname ]; then
15     echo "Directory already exists"
16 else
17     mkdir $dirname
18     echo "The $dirname directory has been created"
19 fi
20
21 exit 0
```

Task 4

```
1  #!/bin/bash
2
3  # Write a script named calcbonus.sh that determines the bonus applicable in dollars to a commission earned, _
4  # _as shown below:
5      # <=200 No bonus applicable
6      # <=300 Fifty dollar bonus applicable
7      # >300 One hundred dollar bonus applicable
8
9  # When the script is run, it will begin by prompting the user for this commission amount
10 # The correct bonus applicable should be stored as an integer in a variable named bonus
11 # Print a message to the screen that tells the user what bonus is applicable to the commission entered
12
13 bonus=0
14
15 read -p 'Enter the commission earned: ' comm
16
17 if [ $comm -le 200 ]; then
18     echo "No bonus applicable"
19 elif [ $comm -le 300 ]; then
20     bonus=50
21     echo "The bonus applicable is $bonus dollars"
22 else
23     bonus=100
24     echo "The bonus applicable is $bonus dollars"
25 fi
26
27 exit 0
```

Task 5

```
1  #!/bin/bash
2
3  declare -a vals
4  vals=(3.05 4.12 6.34)
5
6  # OPTION 1: echo the array values into awk/printf
7  sum2=$( echo ${vals[0]} ${vals[1]} ${vals[2]} | awk '{ printf "%.2f", $1+$2+$3 }' )
8
9  # OPTION 2: pass desired scale and expression into the bash calculator (bc)
10
11 sum3=$( echo 'scale=2;${vals[0]} + ${vals[1]} + ${vals[2]}' | bc -l )
12
13 echo "The awk calculated sum of ${vals[0]} and ${vals[1]} and ${vals[2]} is $sum2"
14
15 echo "The bc calculated sum of ${vals[0]} and ${vals[1]} and ${vals[2]} is $sum3"
16
17 exit 0
```