Scripting Languages: Workshop 5 Possible Solutions

Task 1

```
#!/bin/bash

grep -c '^GET' sampledata.txt

exit 0
```

Task 2

```
#!/bin/bash

grep '573[[:cntrl:]]*$' sampledata.txt

exit 0
```

Task 3

```
#!/bin/bash

grep -E '(jsp)|(py)|(asp)|(aspx)' sampledata.txt

exit 0
```

Task 4

```
#!/bin/bash

grep -c '404.*506' sampledata.txt

exit 0
```

Task 5

```
#!/bin/bash

grep 'http.*5\.162.*$' < sampledata.txt > 162attempts.txt
# grep 'http://192\.168\.5\.162/$' < sampledata.txt > 162attempts.txt
# grep 'http.*5\.162.*$' < sampledata.txt > 162attempts.txt

exit 0
```

Task 6

```
#!/bin/bash

grep '404.*506$' < sampledata.txt > 404messages.txt

exit 0
```

Task 7

```
#!/bin/bash

grep -c -v -E '50[0-9]{1}' sampledata.txt

exit 0
```

Task 8

```
#!/bin/bash

read -p 'Please enter an integer of any length: ' unit

if [[ $unit =~ ^[0-9]+$ ]]; then
    echo "Congratulations, you have enter a valid integer"
else
    echo "Sorry, the value you have entered is not a valid integer"
    exit 1
fi

exit 0
```

Task 9

```bash
#!/bin/bash

# Write a script that calculates the total sales for those products in salesdata.csv with a product code that ends in XS
# Works in conjunction with file salesdata.csv that should be in same working directory as this script

# Place file name into a variable
# Create a variable for the total and initialise it
file="salesdata.csv" ttl=0.00

# Grab the contents of the file (cat)
# Remove the header so it is not processed (tail)
# Get rid of all lines that don't have XS in them (grep)
# Place whar remains into a temp file for the next stage of processing ( > temp )
cat $file | tail -n +2 | grep ".*XS.*" > temp

# Give the for loop the lines of data to be acted upon
for item in $( cat temp ); do
    # Get the length of the current product code in $item
    len=$(expr length $( echo $item | cut -f1 -d , ) )
    # Test if the second last and last characters of the current product code are XS
    if [[ $( echo $item | cut -f1 -d , | cut -c $(($len-1))-$(($len)) ) == "XS" ]]; then
        # If true (last two characters of product code are XS), grab corresponding sales amount and update total ($ttl)
        ttl=$( echo $ttl $( echo $item | cut -f2 -d , | tr -d '$') | awk '{ printf "%.2f", $1+$2 }' )
    fi
done

# Output the total to the terminal
echo "Total sales for product codes ending in XS is \$$ttl"

exit 0
```