

## Perl application developer exercise

### Files Overview

```
perl_test-
|_Data
|   |_AAA_units_sold.txt
|   |_BBB_units_sold.txt  etc...
|
|_Report
|   |_Products.pm
|
|_show_report.pl
```

The accountants at ABC Widget Co require sales statistics report for this past quarter (jan-mar). The report must be created as a perl command line application. Rename first\_last.pl to your first name underscore last name. Ex, if your name is John Smith, your test file should be called john\_smith.pl.

### Program Input / Output

Below is a sample output. Exact spacing or text decoration do not need to match exactly. We are looking for a clear format with columns aligned. The figures in the table below are to demonstrate format only and do not represent actual calculations.

```
Command-prompt -> perl show_report.pl
Reporting Tool. Enter your first Name:
John8
```

```
*Invalid name! Enter your first Name:
```

```
John
```

```
Report Prepared for John
```

```
=====
Product      Gross          Net after      Earnings
              Sales          0.18 tx      Ratio
-----
CCC           654.36           84.51         9.52
BBB           265.04          164.56         2.10
AAA           654.08          195.51         1.23
```

## **File Summary**

### Report/Products.pm

This is a perl class module which provides the company's income tax rate as well as the retail price and unit cost for each product; AAA, BBB and CCC.

### Data/\*

The number of units sold per product per month is found by reading *certain* files in the Data directory. Those we are concerned with begin with a product name, ie AAA, followed by a single underscore, followed by a lower case three letter month abbreviation then “\_units\_sold.txt”. There are many files which are not relevant including backups and package weight files.

If you read a valid file name, such as “AAA\_jan\_units\_sold.txt” and it does not contain a positive integer, substitute the value 5. Valid values include 50, 64 and 3. Invalid values might be but are not limited to " 3b", "empty" or a single space.

## **Getting the user's name**

Your program must ask for the user's first name. It will be displayed in the report. A valid first name contains only letters. As shown above, the user should be prompted to re-enter their name if invalid characters are detected.

## **Gross Sales Calculation**

For each product, the sum of units sold from jan to march multiplied by the retail price.

## **Net After Tax**

The sum of units sold from jan to march multiplied by the unit price then subtracted from gross sales. We will refer to this intermediate figure as gross profit. Taxes are calculated on the gross profit, at the rate which is randomly generated by Products.pm. Taxes are deducted from the gross profit to give the net profit which should be displayed in your output.

## **Earnings Ratio**

This is the net profit after tax divided by gross sales.

## **General Notes**

- At no point should program send an error to the command line. All potential exceptions should be caught with a message to the user asking them to try again later.
- Need to construct an instance of Products.pm to access price and cost data.