**Pre-Requisite:-**

* Install following cpan modules

1. Text::Trim,
2. Text::CSV,
3. File::HomeDir,
4. File::Temp

**How to Run the program:-**

Run sample.pl in the folder. It will pop up a cmdline asking for user input . You need to enter the input filename along with absolute path .

Press Enter after that. It will generate the path of output.txt.

**Solution explanation :**

Each row of input file is checked for length, if length is less than 176 chars then the line is dropped and moves to next line. At the moment error is nor thrown if length is not matched simply the row is dropped.

There is a logfile created with name “result.log” in same directory on execution with information if row was processed successfully or dropped.

The output report file always has a unique file name example :- (output-1566687477.csv).

A sample has been attached.

**Assumptions Made by me:-**

Total\_transaction can be negative according to the data and formula (quantity long – quantity short) given to me . Changes can be made if this is not true.

**Format of the data in report file :-**

The report has 3 headers as mentioned in the requirement :-

* **"Client\_Information"** -> Combination of "client\_type", "client\_account\_number", "client\_number" and "client\_subaccount\_number" separated by “-“
* **"Product\_Information"** -> Combination of "symbol", "product\_group\_code", "exchange\_code", "expiration\_date" separated by “-“
* **"Total\_Transaction\_Amount"** -> Total transaction of client for one type of product

**Tests:-**

* TestClientTransactionInfo -> Tests that information of each entry of input file extracted is correct
* TestDataFileOperation-> Tests conversion of client and product data in json format is correct
* Test data -> 2 data files are used

1. TestData.txt : Has valid length data
2. BadLengthTestData -> Has one line with invalid length

**Future Implementation :-**

Packaging the module with Makefile.pl . Generate error report in case the line of input file does not meet length (176 chars).

And better logging.