# Requirement

## Prerequisites

Text file contains transaction records where each row has one transaction for a particular product by particular client.

## Business requirement

Business would like to see transaction summary which includes

* unique product for a particular client
* Total transaction amount for a particular product per client.

# Programming Tasks

## Reading Input file

1. Read input file from desired location
2. Read each line as a one transaction

* Split each line into desired fields according to “System A File Specification”.
* Following fields are required
* CLIENT TYPE, CLIENT NUMBER, ACCOUNT NUMBER, SUBACCOUNT NUMBER
* EXCHANGE CODE, PRODUCT GROUP CODE, SYMBOL, EXPIRATION DATE QUANTITY LONG, QUANTITY SHORT, TRANSACTION DATE

1. Save each record for temporarily either into collection or temporary database.

## Writing Output csv file

1. Select distinct transaction per client for unique product
2. Unique product is combination of

* CLIENT NUMBER, EXCHANGE CODE, PRODUCT GROUP CODE, SYMBOL l, EXPIRATION DATE, TRANSACTION DATE

1. Calculate total amount Total
2. total amount=sum (QUANTITY LONG, QUANTITY SHORT) for each unique product per client for particular transaction date
3. Write to csv file with

Header

* Client\_Information
* Product\_Information
* Total\_Transaction\_Amount

Client information is combination of (CLIENT TYPE, CLIENT NUMBER, ACCOUNT NUMBER, SUBACCOUNT NUMBER)

Product information is combination of

EXCHANGE CODE, PRODUCT GROUP CODE, SYMBOL, EXPIRATION DATE