VWAP application

The objectives are to design, document and code an application that reads a file of trades and displays information relating to the trades/VWAP. The time allowed to complete the project will be a maximum of 3 days, after which time you will be required to present your work/application.

**Objective1**

* Write a program to read the csv trade file and calculate the VWAP in two ways
  + Per unique stock / trade type combination
  + Per stock

**Objective 2**

* Provide an option to save the above results in 2 new separate files, 1 for each data set, in a similar format to the input data

**Objective 3**

* As per objective 2, but using a different data format (of your choice)

**Objective 4**

* Provide a simple interface to be able to
  + Allow selection(filtering) and input of an Epic
  + Display the overall VWAP and the VWAP per trade type for that stock in an innovative way

**Objective 5**

* What other data/calculations might be of interest apart from VWAP?

**Objective 6**

* comment on any aspects of the data that strike you

**Definition of VWAP (Volume weighted average)**

The VWAP is simply the average price of stock, in a period of time, based on

(total value of shares traded)

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(total volume of shares traded)

So, if you have 2 trades

1. 1000 shares at £2.00
2. 4000 shares at £2.50

The VWAP is

(1000 \* £2.00) + (4000 \* £2.50)

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(1000 + 4000)

= £2.40

**Description of fields**

|  |  |
| --- | --- |
| Field | Description |
| Epic | Short name for the stock |
| ISIN | Long unique name for the stock |
| Trade Ref | Unique code for each transaction |
| Trade Type | The type of trade |
| Quantity | The number of shares traded |
| Price | The price at which the shares were traded |