SWE 311

Lab 1 – Introduction

Section 52

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Task Contribution:

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| Task | Contribution |
| Requirement | Rasheed, Sadiq and Fahad |
| Design | Rasheed, Sadiq |
| Implementation | Sadiq, Rasheed |
| Testing | Fahad |

Requirements:

* Coded in Java
* Load given data
* Ability to ask for a price on a specific day
* Ability to calculate the simple moving average
* Ability to calculate the exponential moving average with typical smoothing
* Calculate the dividend yield
* The ability to select default time periods (the past 5, 10, 100, 365 days) to calculate the simple/exponential moving averages

The requirements are not yet finalized by the lab instructor.

Design and Implementation:

Graphical user interface

Description automatically generated

Class Record and divRecord are used for handling the csv entries as objects.

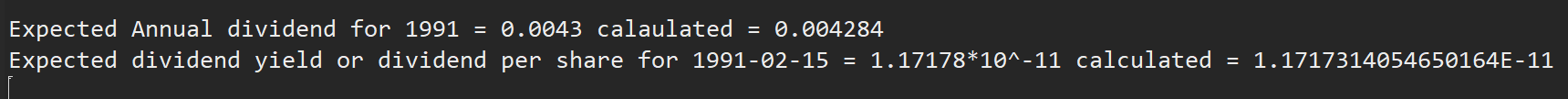
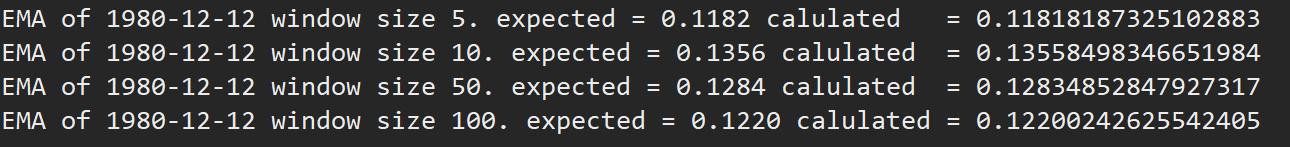
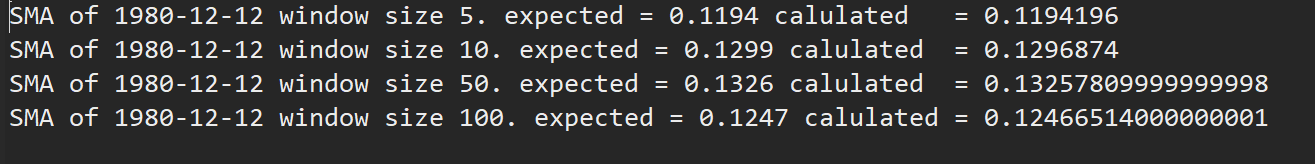
Class DataFrame is the class that handles the calculations and has an ArrayList of type record and an ArrayList of type divRecord that are used to save the csv entries in their respective objects. We also use csvReader import to help us with csv file reading.

Since the requirement are not yet finalized and lacking a lot of details, we made the file without an interface since to such specification was given and we did not get an answer for our question regarding implementing an interface.

Testing:

We wanted to use unit tests for our own testing put We could not get junit5 to work and junit4 was not running in Eclipse due to it being deprecated package. Therefore, for now we did a very simple hand coded test with calculated values in excel to test our functions.

**Snapshots:**

Graphical user interface, text

Description automatically generated