Exercise 3

Programming III in C++

Computer Science

The following records show a part of a warehouse stock:

| No | Description | Actual Stock | Maximum Stock | Cost Price | Consumption per Day | Order Duration |
|-----|-------------|--------------|---------------|------------|---------------------|----------------|
| 100 | couch C | 31 | 75 | 350,00 € | 5 | 7 |
| 101 | Stool A | 52 | 150 | 33,95 € | 12 | 3 |
| 102 | cabinet D | 77 | 100 | 160,50 € | 3 | 21 |
| 103 | chair B | 4 | 90 | 175,00 € | 7 | 8 |
| 104 | table A | 28 | 120 | 99,95 € | 5 | 12 |

- Develop a class Article with the attributes numberOfArticel, description, costPrice and orderDuration.
- Develop a class *Stock* with the attributes *articleNumber*, *actualStock*, *maximumStock* and *consumption*.
- · Create a way to read in the above stock file
- Calculate the total stock value
- Create a stock file in which additional columns for the *reorder point* and an *order proposal* are added.

The *reorder point* is calculated from the consumption per day and the order duration, whereby an additional 2 days reserve is calculated. An order proposal has to be generated if the actual stock is less than or equal to the reorder point. The order proposal is then calculated from the difference between the actual stock and the reorder point.