



<b>Project:</b>	CMP2003 Data Structures and Algorithms (C++) – Term Project	
<b>Date:</b>	30.12.2019	
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### ▪ The Purpose of the Project

Writing a C++ Console application which reads a csv file that consists of transactions occurring between 01/12/2010 and 09/12/2011 for a UK-based and registered non-store Online retail. The program must be able to store individual products (given with StockCode) from csv file.

After reading and processing is over, the program will list the “*Top 10*” products ordered by individuals and calculating the total elapsed time of the project.

### ▪ Report

The Libraries used for the project are:

- Iostream
- String
- Ctime
- Fstream

Which are written in the pdf files, Project team restricted themselves for these libraries, Linkedlist used as data structure for the project, this data structure is chosen for its dynamic capabilities, and for sorting searching algorithm team have used binary sorting searching algorithm.

## ▪ Test

Program has been tested on a computer that has 6th generation i5 processor and it took 5 seconds to execute the entire program.

ITEM STOCKCODE	ITEM QUANTITY	ITEM DESCRIPTION
22197	56450	SMALL POPCORN HOLDER
84077	53847	WORLD WAR 2 GLIDERS ASSTD DESIGNS
85099B	47363	JUMBO BAG RED RETROSPOT
84879	36221	ASSORTED COLOUR BIRD ORNAMENT
21212	36039	PACK OF 72 RETROSPOT CAKE CASES
23084	30646	RABBIT NIGHT LIGHT
22492	26437	"MINI PAINT SET VINTAGE "
22616	26315	"PACK OF 12 LONDON TISSUES "
21977	24753	PACK OF 60 PINK PAISLEY CAKE CASES
22178	23854	VICTORIAN GLASS HANGING T-LIGHT
Elapsed Time for Reading: 5		
Elapsed Time for Sorting: 0		
Elapsed Total Time: 5		

## Conclusion

With linkedlist method entire process took 5 seconds to complete, and its been sorted in a descended order.