Task one:

A bit of data processing I.E sorting happens as the data is being pulled from the csv file. This is to avoid having additional functions to handle data sorting. I.E pulling data into a temp list or dictionary and then iterating through it and sorting it that way, this would make the data import portion of the program less efficient.

Classes were also opted for as although there is an overhead with them, they are much easier to use than a dictionary and list combination due to the lack of a need to keep track of where in your list a piece of data is being stored.

Task Two:

Data storage is the same as task one.

In substitution algorithm I did not allow the substitution of items from shop D (cheap Store) as potentially charging a customer more for an Item they wanted cheap is unfair particularly as we are shopping for pensioners.

Task three:

Data storage is the same as task two.

Task 3 does not use substitutions because of the removal of the rule “can’t keep shopping for more than one day” instead it uses a more intelligent delivery condition that only delivers when all items have been placed in the delivery schedule for a given house. Due to the way my program was designed removing this was the best option to avoid unnecessary processing of data.