BOOK BUTLER PROJECT REPORT/ANALYSIS

Following are the csv files that we’ll use in the first few functions:

1. Book\_list which contains the information in the following order: bookname, author, genre and price
2. User\_data which contains information in the following order: reader, (bookname, True/False)……..(bookname, T/F)

T/F represents whether the readers likes or dislikes that book respectively

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The function ‘openbookfile(name)’ takes book\_list.csv as input and converts the information contained in it in dictionary form. The function does the following:

1. It first reads the csv file
2. A loop is run over the data, y in x accessing each line in the file
3. Z in y accessing each element of that line and adding it to a tuple which is empty before every loop and contains elements of that particular line

All of these tuples are inserted into a list, F

Then a loop is run over this List, accessing each tuple. The first element is made the key of a dictionary called bookdict, the remaining made elements made that key’s items. The key is the name of the book, its items is a list containing: a list that tells the genres, author name, price.

At the end of the function the dictionary is stored in the variable book\_data

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The function ‘userdataload(name)’ converts the UserData.csv into a dictionary that contains the readers/users as keys and the item is a dictionary which contains booknames as keys and T/F as its values. Now the function works in the following manner:

It first reads the csv file and then a loop is run over the data in the file

1. Y in x accesses each line in the file
2. Z in y accesses each element of that line

Every element is then added to a tuple which is initially empty before the loop which is then appended to the list, F. after the loop has completed, we have the list F which contains these tuples. Then a second loop is run over this list which accesses the tuples.

1. Y in range len x accesses the index of the elements inside the tuple
2. Except for the element with the index 0, (which is the name of the reader), the elements are split and then (separating the book name and the likeness value: T/F). then these elements are put in a dictionary called Final.
3. Then the final is put into the main dictionary called bookdict2 which contains keys as users/readers and final as its value which itself is a dictionary

After this function bookdict2 is stored in the variable user\_data.

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The function ‘WeightEdgeCreate(data\_dict)’ creates a list that contains a list which contains tuples. The tuples have the following information,