

### **Mulah Assessment 3**

We create a class for each company that is in the list, inside these classes hold attributes that record how many points that company owes another company

We will also create a dictionary/binary search tree, with each node storing the company names in (key, company) value

We first create 2 pointers and initialize it at the start of the dataset.

We will call these two pointers "1" and "2"

"1" will iterate through the list until it reaches a point redemption, the data of the company that the points were redeemed at and the total points redeemed is stored in an attribute

"2" will then start iterating from the beginning of the list

Each row that "2" reaches, the number of points is deducted from total points redeemed, total deducted and:

if the total redeemed points hit zero:

the pointer remains and the remaining points is stored in that row, deducted points are added to the right position in company owe list

else:

the pointer continues to the next row, deducted points are added to the right position in company owe list

this process repeats until redeemed points hit 0 , then "1" continues to iterate

process repeats until end of document