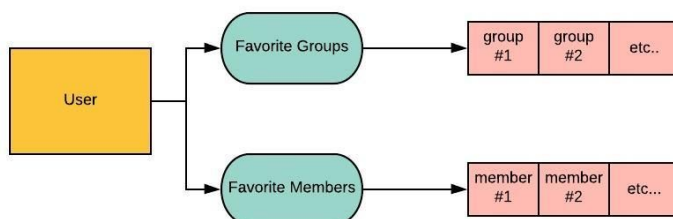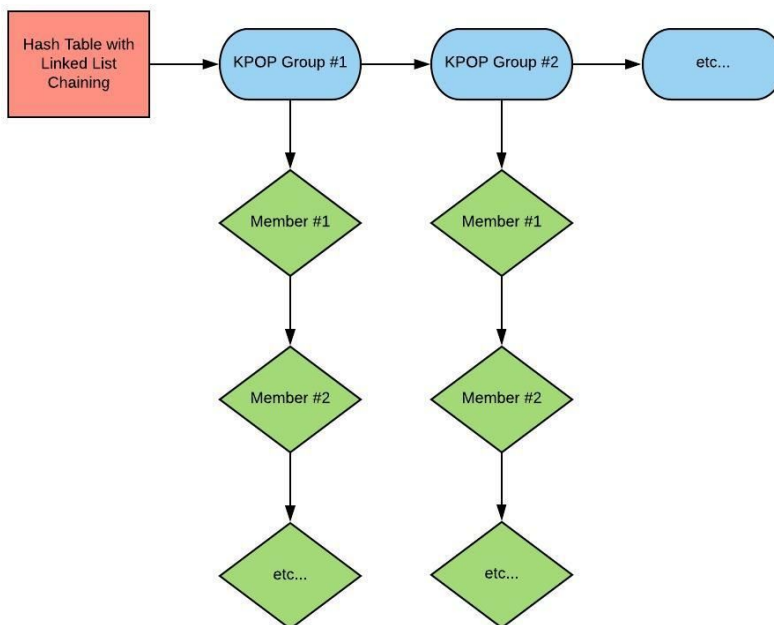Amey Erdenebileg
Vananh Le
CSCI 2270
12.7.2019

Final Project Report

Data Structures

For this project, we used hash table as our main data structure. We sorted our hash table by the number of letters in each of the KPop group names. There was of course going to be collisions but we resolved it by chaining with linked list. We also used another linked list inside of the already existing linked list of the groups for the members and to store all of the individual information. For the part with the user, we used a vector to store their favorite groups and another vector to store their favorite idols.

Methodology

Amey Erdenebileg
Vananh Le
CSCI 2270
12.7.2019

Data

For the data, we created a csv file and gathered information from a kpop information website. We input the data in the order of: group the idol is in, idol name, their position within the group, their birthday, their height and one fun fact about them. In the end, we included 25 total groups and total of 162 idols.

Results

In the end, we got all of our code functional and added some additional print statements to have it look nice (All final outputs on sample outputs document).

```
▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬■ M A I N  M E N U ■▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬
                    1. Display all groups
                    2. Display members from a group
                    3. Search an idol
                    4. Add favorite group
                    5. Add favorite idol
                    6. Delete a group from favorites
                    7. Delete an idol from favorites
                    8. Test your KNOWLEDGE
                    9. See your GROUP RANKING
                    10. See your IDOL RANKING
                    11. LOG OUT
2
Please insert a group: itzy
                    ▬▬▬▬▬▬▬▬▬■ *·☆·* ■▬▬▬▬▬▬▬▬▬
                              ITZY
                    ♫♪ Yeji      ♫♪ Lia
                    ♫♪ Ryujin    ♫♪ Chaeryeong
                    ♫♪ Yuna
▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬■ M A I N  M E N U ■▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬
                    1. Display all groups
                    2. Display members from a group
                    3. Search an idol
                    4. Add favorite group
                    5. Add favorite idol
                    6. Delete a group from favorites
                    7. Delete an idol from favorites
                    8. Test your KNOWLEDGE
                    9. See your GROUP RANKING
                    10. See your IDOL RANKING
                    11. LOG OUT
3
Please insert the idol's name: ren
                    ▬▬▬▬▬▬▬▬▬■ *·☆·* ■▬▬▬▬▬▬▬▬▬
                              Ren
        Group: NU'EST
        Position: Vocalist
        Birthday: November 3 1995
        Height: 178 cm
        Fun Fact: Ren is a big fan of Lady Gaga
```