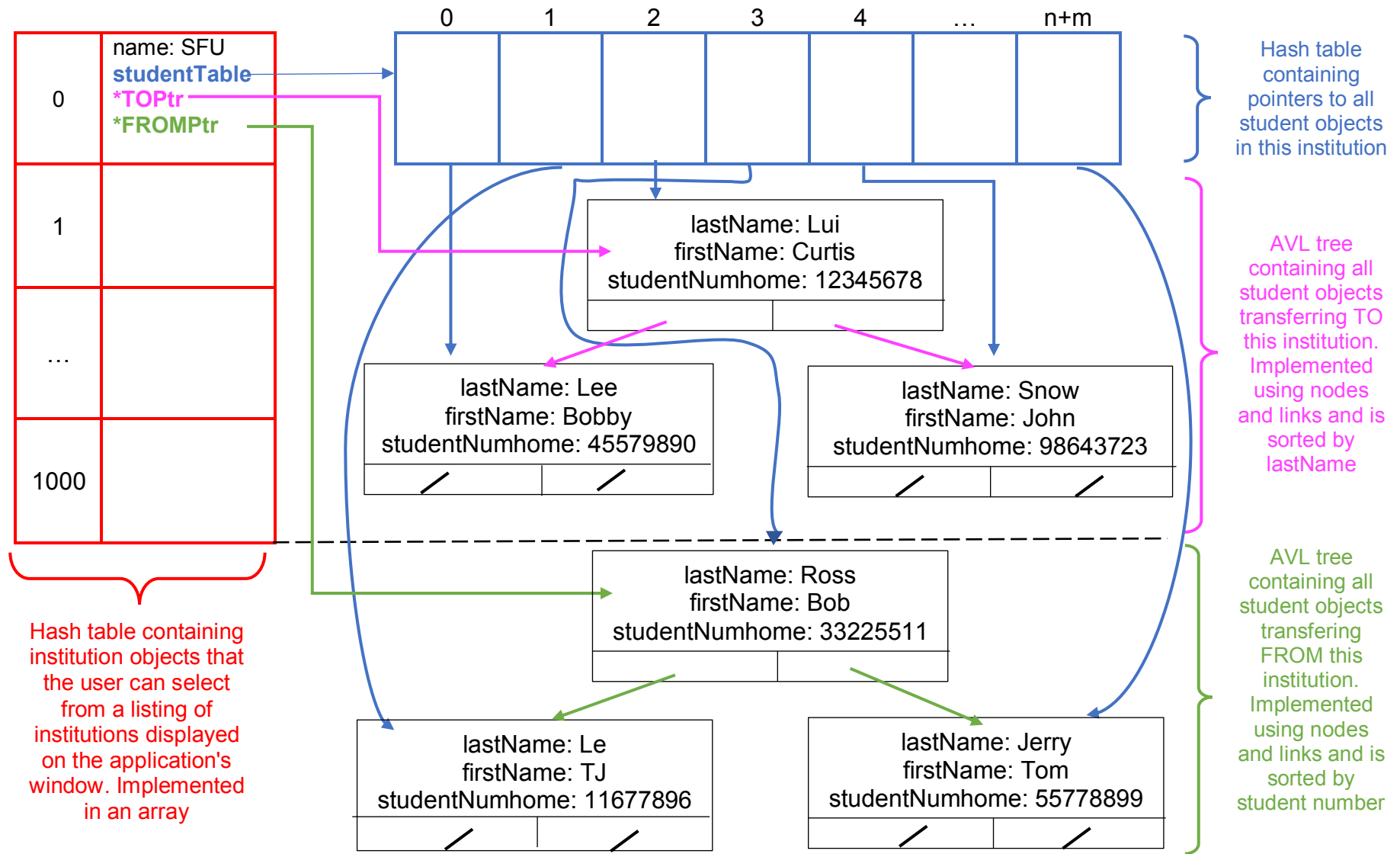


Part 1 – Design

1.



```

1  /*
2  * Institution.h
3  *
4  * Definition: An institution object that contains all relavent informatin
5  *             related to the instiution
6  *
7  * Created on:  March 2019
8  * Author:      Curtis Lui
9  *
10 */
11
12 #include <string>
13 #include "Student.h"
14 #include "Node.h"
15
16 using namespace std;
17
18 const int MAX_NUM_STUDENTS = 40000;
19
20 class Institution
21 {
22     private:
23         string name;
24         string mailAddress;
25         string regOffEmail;
26         string regOffPhonenum;
27
28         Node<Student> *T0ptr;
29         Node<Student> *FROMptr;
30         Node<Student> *studentTable[MAX_NUM_STUDENTS];
31
32         unsigned int numTransIn;
33         unsigned int numTransOut;
34 }; // End of Institution

```

```
1  /*
2  * Student.h
3  *
4  * Definition:  A student object that contains all relevant information
5  *              related to a student
6  *
7  * Created on:  March 2019
8  * Author:      Curtis Lui
9  *
10 */
11
12 #include <string>
13
14 using namespace std;
15
16 class Student
17 {
18     private:
19         string lastName;
20         string firstName;
21         string mailAddress;
22         string email;
23         string phoneNumber;
24         string homeInstitution;
25         string studentNumhome;
26         string transInstitution;
27         string applyFaculty;
28         string applyProgram;
29
30 }; // End of Student
```