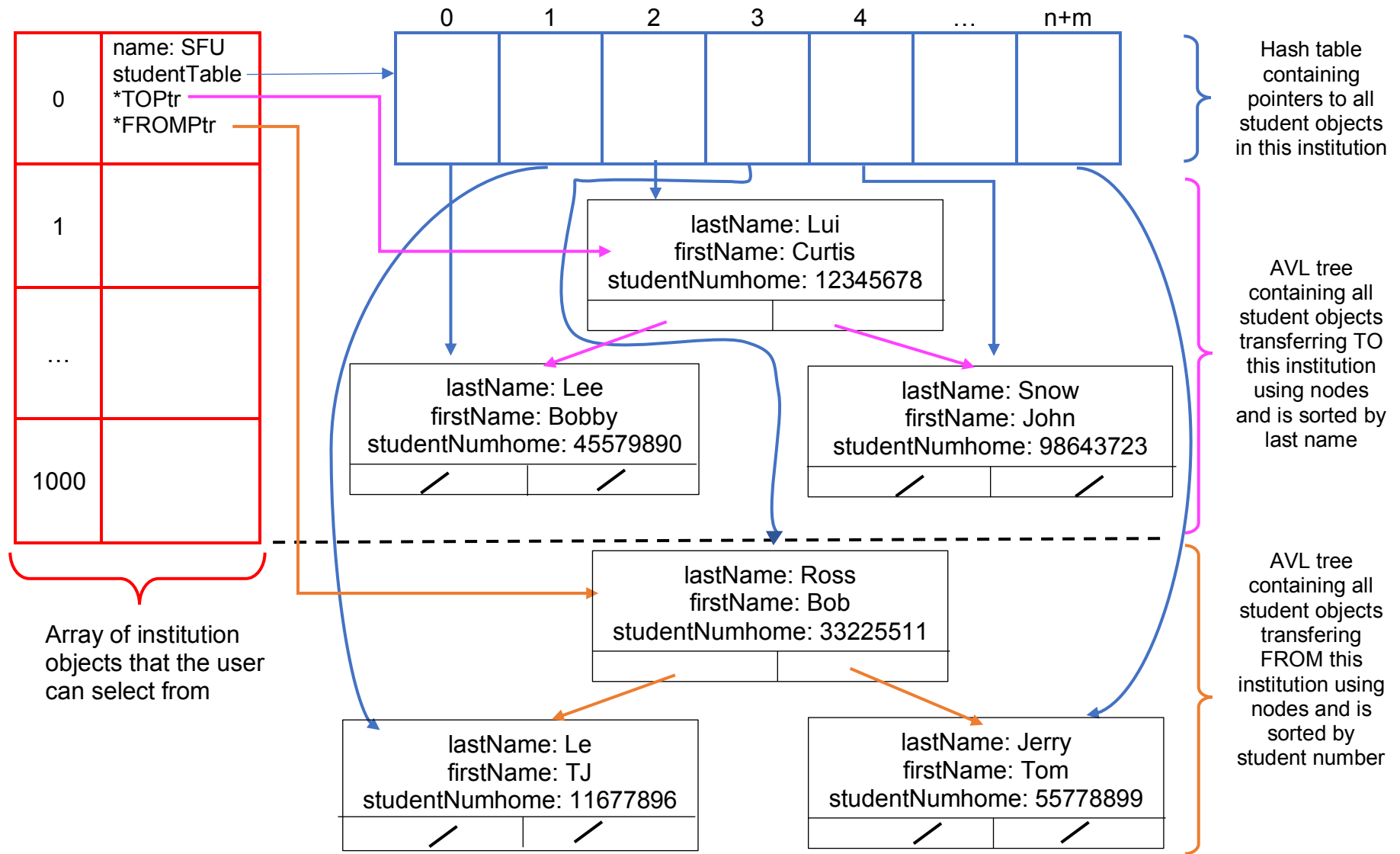


Part 1 – Design

1.



```
1  /*
2  * Institution.h
3  *
4  * Class Definition:
5  *
6  * Created on: March 2019
7  * Author: Curtis Lui
8  *
9  */
10
11 #include <string>
12 #include "Student.h"
13 #include "Node.h"
14
15 using namespace std;
16
17 const int MAX_NUM_STUDENTS = 4000000;
18
19 class Institution
20 {
21     private:
22         string name;
23         string mailAddress;
24         string regOffEmail;
25         string regOffPhonenum;
26
27         Node<Student> *T0ptr;
28         Node<Student> *FROMptr;
29         Node<Student> *studentTable[MAX_NUM_STUDENTS];
30
31         unsigned int numTransIn;
32         unsigned int numTransOut;
33 }; // End of Institution
```

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