**Name:**

**Lab Exercise 4/19/2023**

**Advanced Programming in C++**

**Hash Table Project**

In this exercise you will create a Hash Table that holds the head pointers for a series of Linked Lists. Your Hash Table must contain 26 elements with element 0 holding the address of the Linked List of names that start with A and element 2 holding the address of the Linked List that holds the names that start with B and so forth.

Initially, the Linked Lists will all be empty (the pointers in the Hash Table will be NULL). The program should prompt the user to enter a name at which time a new Node is constructed and the last name key is passed to a hash function to determine which element of the Hash Table’s Linked List to insert the new node. The new node should be entered into the Linked List in order.

Here is a pictorial drawing of your data structure:

0

1

2

3

4

5

6

7

23

24

25

Aaron

Adams

Alexis

Charles

Christi

Cleon

Elf

Emmet

Epoch

Ghana

Grey

Grimes

Xaxon

Xena

Xhoa

When you project is completed, submit your source code attached to this sheet.