

First Name:

Last Name:

Q1: Read the instructions for question Q1 in the assignment document. **For each of the sub-questions, enter your answer in the given space.**

(a): Enter the computed values for $m[i, j]$.

$$m[1, 1] =$$

$$m[1, 2] =$$

$$m[1, 3] =$$

$$m[1, 4] =$$

$$m[1, 5] =$$

$$m[1, 6] =$$

$$m[2, 1] =$$

$$m[2, 2] =$$

$$m[2, 3] =$$

$$m[2, 4] =$$

$$m[2, 5] =$$

$$m[2, 6] =$$

$$m[3,1] =$$

$$m[3,2] =$$

$$m[3,3] =$$

$$m[3,4] =$$

$$m[3,5] =$$

$$m[3,6] =$$

$$m[4, 1] =$$

$$m[4, 2] =$$

$$m[4, 3] =$$

$$m[4, 4] =$$

$$m[4, 5] =$$

$$m[4, 6] =$$

(b): The computed LCS is

Q2: Read the instructions for question Q2 in the assignment document. **For each of the three sub-questions, enter your answer in the given space.**

(a): The load factor is (write your answer as a fraction)

(b)-1: The 1st cell probed by Hash-Insert(T , 25) is

(b)-2: The 2nd cell probed by Hash-Insert(T , 25) is

(b)-3: The 3rd cell probed by Hash-Insert(T , 25) is

(c)-1: The 1st cell probed by Hash-Delete(T , 8) is

(c)-2: The 2nd cell probed by Hash-Delete(T , 8) is

(c)-3: The 3rd cell probed by Hash-Delete(T , 8) is

Q3: Read the instructions for question Q3 in the assignment document. **For each of the following sub-questions, enter your answer in the given space.**

(a): The hash value $h(k)$ is

(b)-1: The worst-case time complexity for insertion is (using O-notation)

(b)-2: The worst-case time complexity for searching is (using O-notation)

(b)-3: The worst-case time complexity for deletion is (using O-notation)