First Name: Deven Last Name: Pile

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 $m[i, j]$.

$m[1,1] =$ 0

$m[1,2] =$ 1

$m[1,3] =$ 1

$m[1,4] =$ 1

$m[1,5] =$ 1

$m[1,6] =$ 1

$m[2,1] =$ 0

$m[2,2] =$ 1

$m[2,3] =$ 1

$m[2,4] =$ 1

$m[2,5] =$ 2

$m[2,6] =$ 2

Carefully read the instruction for each question in the assignment document

$m[3,1] =$ 0

$m[3,2] =$ 1

$m[3,3] =$ 1

$m[3,4] =$ 1

$m[3,5] =$ 2

$m[3,6] =$ 2

Carefully read the instruction for each question in the assignment document

$m[4,1] =$ 0

$m[4,2] =$ 1

$m[4,3] =$ 2

$m[4,4] =$ 2

$m[4,5] =$ 2

$m[4,6] =$ 3

(b): The computed LCS is <C,B,A>

Carefully read the instruction for each question in the assignment document

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)

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

12

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

0

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

1

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

8

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

9

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

10

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

1925

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

O(1)

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

O(n)

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

O(n)