

Enter the input filename: HW5TestInput1.txt
Inserted into HashSC: 203.255.234.105, cbffea69
Inserted into HashQP: 203.255.234.105, cbffea69
Inserted into HashSC: 203.255.234.102, cbffea66
Inserted into HashQP: 203.255.234.102, cbffea66
Inserted into HashSC: 203.255.234.103, cbffea67
Inserted into HashQP: 203.255.234.103, cbffea67
Inserted into HashSC: 203.255.234.106, cbffea6a
Inserted into HashQP: 203.255.234.106, cbffea6a
Inserted into HashSC: 203.141.52.41, cb8d3429
Inserted into HashQP: 203.141.52.41, cb8d3429
Inserted into HashSC: 203.141.52.42, cb8d342a
Inserted into HashQP: 203.141.52.42, cb8d342a
Inserted into HashSC: 203.141.52.43, cb8d342b
Inserted into HashQP: 203.141.52.43, cb8d342b
Inserted into HashSC: 203.141.52.44, cb8d342c
Inserted into HashQP: 203.141.52.44, cb8d342c
Inserted into HashSC: 207.126.239.224, cf7eefe0
Inserted into HashQP: 207.126.239.224, cf7eefe0
Inserted into HashSC: 203.141.52.45, cb8d342d
Inserted into HashQP: 203.141.52.45, cb8d342d
Inserted into HashSC: 203.141.52.46, cb8d342e
Inserted into HashQP: 203.141.52.46, cb8d342e
Inserted into HashSC: 203.141.52.47, cb8d342f
Inserted into HashQP: 203.141.52.47, cb8d342f
Inserted into HashSC: 206.190.43.125, cebe2b7d
Inserted into HashQP: 206.190.43.125, cebe2b7d
Inserted into HashSC: 206.190.43.81, cebe2b51
Inserted into HashQP: 206.190.43.81, cebe2b51

Contents of HashSC with the IpValue key:

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31: 206.190.43.81, cebe2b51
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51: 203.255.234.102, cbffea66
52: 203.255.234.103, cbffea67
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54: 203.255.234.105, cbffea69
55: 203.255.234.106, cbffea6a
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79: 207.126.239.224, cf7eefe0
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85: 203.141.52.41, cb8d3429
86: 203.141.52.42, cb8d342a
87: 203.141.52.43, cb8d342b
88: 203.141.52.44, cb8d342c
89: 203.141.52.45, cb8d342d
90: 203.141.52.46, cb8d342e
91: 203.141.52.47, cb8d342f
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In the HashSC object:

Table Size = 97
Number of entries = 14
Load factor = 0.14432989690721648
Number of collisions = 0
Longest Linked List = 1

Contents of HashQP with the String key:

0: 203.255.234.103, cbffea67
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2: 203.255.234.105, cbffea69
3: 203.255.234.106, cbffea6a
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20: 207.126.239.224, cf7eefe0
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26: 206.190.43.125, cebe2b7d
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30: 206.190.43.81, cebe2b51
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72:
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75: 203.141.52.41, cb8d3429
76: 203.141.52.42, cb8d342a
77: 203.141.52.43, cb8d342b
78: 203.141.52.44, cb8d342c
79: 203.141.52.45, cb8d342d
80: 203.141.52.46, cb8d342e
81: 203.141.52.47, cb8d342f
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96: 203.255.234.102, cbffea66

In the HashQP object:

Table Size = 97
Number of entries = 14
Load factor = 0.14432989690721648
Number of collisions = 0
Longest Collision Run = 0

Testing HashSC with IpValue key:

Retrieved in HashTable, IPAddress: 206.190.43.81, cebe2b51, now trying to delete it
The insert method for 206.190.43.81, cebe2b51 returns false
Removed 206.190.43.81, cebe2b51 successfully!
The contains method for Default IPAddress returns false
Didn't retrieve Default IPAddress (GOOD!)
The insert method for 0.0.0.0, 0 returns true
Removed 0.0.0.0, 0 successfully!

Testing HashQP with String key:

Retrieved in HashTable, IPAddress: 206.190.43.81, cebe2b51, now trying to delete it
The insert method for 206.190.43.81, cebe2b51 returns false
Removed 206.190.43.81, cebe2b51 successfully!
The contains method for Default IPAddress returns false
Didn't retrieve Default IPAddress (GOOD!)
The insert method for 0.0.0.0, 0 returns true
Removed 0.0.0.0, 0 successfully!

Now the contents of HashSC with the IpValue key has:

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51: 203.255.234.102, cbffea66
52: 203.255.234.103, cbffea67
53:
54: 203.255.234.105, cbffea69
55: 203.255.234.106, cbffea6a
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75: 206.190.43.125, cebe2b7d
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79: 207.126.239.224, cf7eefe0
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85: 203.141.52.41, cb8d3429
86: 203.141.52.42, cb8d342a
87: 203.141.52.43, cb8d342b
88: 203.141.52.44, cb8d342c
89: 203.141.52.45, cb8d342d
90: 203.141.52.46, cb8d342e
91: 203.141.52.47, cb8d342f
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Now the contents of HashQP with the String key has:

0: 203.255.234.103, cbffea67
1:
2: 203.255.234.105, cbffea69
3: 203.255.234.106, cbffea6a
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26: 206.190.43.125, cebe2b7d
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96: 203.255.234.102, cbffea66