**Course: CST8130\_305**

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**CST8130 – Assignment 4 Test Plan** (Using file: Packets.txt)

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| **Condition** | **Input** | **Result** |
| Good case scenario. Addresses are valid as well the port, and the index is null. | p 233 197 123 170 24 154 255 38 222 24 e0 | Adding entry to routing table 233.197.123.0\24  Entry at index [53]: 233.197.123.0\24 Port: e0 |
| Adding duplicate ( Entry is already in the table) | p 173 114 13 173 24 230 156 71 14 24 e0 | Routing table entry not found.  Adding entry to routing table 173.114.13.0\24  Entry at index [0]: 173.114.13.0\24 Port: e0  Entry is already in the routing table 173.114.13.0\24 |
| Adding a new RoutingTableEntry object with collision (hash calculation generates same index for two different addresses). | p 210 96 34 201 24 127 8 92 193 24 x0  p 255 158 27 198 24 206 72 26 26 24 e20 | Adding entry to routing table 210.96.34.0\24  Entry at index [40]: 210.96.34.0\24 Port: x0  Adding entry to routing table 255.158.27.0\24  Entry at index [41]: 255.158.27.0\24 Port: e20 |
| Adding a new RoutingTableEntry object with collision (hash calculation generates same index for two different addresses) at the end of the array. | p 157 87 55 157 24 203 212 235 66 24 e0  p 192 172 35 1 24 203 212 235 66 21 e1 | Adding entry to routing table 157.87.55.0\24  Entry at index [99]: 157.87.55.0\24 Port: e0  Adding entry to routing table 192.172.35.0\24  Entry at index [0]: 192.172.35.0\24 Port: e1 |
| Adding a new RoutingTableEntry object with collision (hash calculation generates same index for two different addresses) at the beginning of the array. | p 173 114 13 173 24 230 156 71 14 24 e0  p 192 128 80 12 24 230 130 71 14 24 e0 | Adding entry to routing table 173.114.13.0\24  Entry at index [0]: 173.114.13.0\24 Port: e0  Adding entry to routing table 192.128.80.0\24  Entry at index [1]: 192.128.80.0\24 Port: e0  . |
| Entry is already in Routing Table | p 181 168 117 79 24 111 183 216 186 24 e4  p 181 168 117 77 24 111 183 216 77 24 e4 | Adding entry to routing table 173.114.13.0\24  Entry at index [0]: 173.114.13.0\24 Port: e0  Entry is already in the routing table 173.114.13.0\24 |
| Search for the port to send the packet. If port not found, drop packet. | d 78 62 21 205 24 94 43 54 238 24 abcd | Routing table entry not found.  Dropping packet....78.62.21.0\24 |