Resultant Hash Table : 0 - 20 1 - 2 - 2 3 - 3 4 - 14 5 - 15 6 - 25 7 - 7 8 - 13 9

In this hash table, the key hashing function is defined as k(k) = k mod 10. We have a set of keys: 14, 20, 15, 3, 2, 25, 7, and 13.

When we insert the key 14, it is placed in position 4, as 14 mod 10 equals 4. Only one cell is visited during this insertion.

Next, the key 20 is inserted, resulting in its placement in position 0, as 20 mod 10 is 0. Again, only one cell is visited during this operation.

The key 15 is inserted and lands in position 5, as 15 mod 10 equals 5. Just one cell is visited in this case as well.

Inserting the key 3 results in placing it in position 3, as 3 mod 10 equals 3. Only one cell is visited during this insertion.

Similarly, the key 2 is inserted into position 2, as 2 mod 10 equals 2. Only one cell is visited during this operation.

When we try to insert the key 25, a collision occurs at position 5 since there's already an item there. We then check the next available position, index 6, and insert 25 there. This insertion involves visiting two cells.

For the key 7, it is placed in position 7, as 7 mod 10 equals 7. Only one cell is visited during this insertion.

Lastly, inserting the key 13 results in a collision at position 3, where an item is already present. We continue checking the next available positions, which leads to multiple checks until we find an empty slot at index 8. Therefore, 13 is inserted at position 8, and a total of six cells are visited during this insertion.