

## Hash Tables - Probing & Chaining

Insert the following values *in order* into each hash table using the specified method for resolving collisions. For all methods, use the hash function  $h(k) = k \bmod m$  (note  $m = 10$  so consider whether or not this is a good hashing function).

15, 55, 91, 27, 89, 46, 77, 35

**Linear Probing**

|   |  |
|---|--|
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |

**Quadratic Probing**

|   |  |
|---|--|
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |

**Chaining**

|   |  |
|---|--|
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |

What is the *load factor* of this hash table?