

2) (5 pts) ALG (Hash Tables)

Suppose have some hash function that produces the following hash values for the following strings.

| String | hash value |
|---------|------------|
| Wicked | 35429 |
| Cheesy | 171745742 |
| Lasagna | 72457241 |
| For | 559079 |
| Dinner | 96879 |

Using the hash values above, insert the strings (one by one, in the order given above, from “wicked” down through “dinner”) into the following hash table. Use **quadratic probing** to resolve any collisions. Note that there is a standard technique for dealing with hash values that exceed the length of a table (e.g., values that exceed 9 in the case of this particular table), and it’s up to you to use that technique here.

Note: The length of the hash table is **10**.

| | | | | | | | | | |
|-----|---------|--------|--------|---|---|---|---|---|--------|
| For | Lasagna | Cheesy | Dinner | | | | | | Wicked |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Grading:

+1 point for each item being in the correct cell.