2) (5 pts) ALG (Hash Tables)

Use the following hash function to insert the given elements into the hash table below. Use **quadratic probing** to resolve any collisions. You may assume that the correct table size (in this case, 10) is always passed to the function with the key that is being hashed.

```
int hash(int key, int table_size)
{
      int a = (key % 100) / 10;
      int b = key % 10;

      return (a + b) % table_size;
}
```

Keys to insert (one by one, in the following order): 2555, 1523, 5893, 800, 956

0	1	2	3	4	5	6	7	8	9
2555	**800***	**5893**			**1523**		**956***		

Grading: Award 1 pt each for each value being in the correct location.

Note: An asterisk indicates that a value encountered at least one collision before arriving at that position. Those asterisks are included simply for the grader's convenience and are not part of the actual solution.