Draw the 11-entry hash table that results from using the hash function, \( h(i) = (2i + 5) \mod 11 \), to hash the keys 12, 44, 13, 88, 23, 94, 11, 39, 20, 16, and 5, assuming collisions are handled by chaining.

**Solution**

![Hash Table Diagram]
What is the result of the previous exercise, assuming collisions are handled by linear probing?

**Solution**

```
11  39  20  5  16  44  88  12  23  13  94
```

Show the result of Exercise R-9.6, assuming collisions are handled by quadratic probing, up to the point where the method fails.

**Solution**

```
20  16  11  39  44  88  12  23  13  94
```

What is the result of Exercise R-9.6 when collisions are handled by double hashing using the secondary hash function \( h'(k) = 7 - (k \mod 7) \)?

**Solution**

```
11  23  20  16  39  44  94  12  88  13  5
```

What is the worst-case time for putting \( n \) entries in an initially empty hash table, with collisions resolved by chaining? What is the best case?

**Solution:**

If the sequences are not sorted, then the worst case time is \( O(n) \). If the sequences are stored in sorted order, then the worst case time is \( O(n^2) \).