

Testing Strategy

1. When the linked list is empty, test `remove()`, `search()`, `is_empty()`, `size()`, `print()` functions. `Remove()`, `search()` and `print()` will throw exceptions. The `print()` function will be used for other tests, so I have to make sure it is correct.
2. Test `insert()` function. I set my map size to 10 and insert a total of 6 items into the map first. After each insertion, I put a `print()` function so that I can visually see how the items were added into the map. I also inserted items with same keys to check if the new one will replace the old one.
3. Now the list is not empty, test the `is_empty()`, `size()` again, and test `capacity()`, `load()`.
4. Test `remove()` and `search()` function. Test `search()` with one in the map, and the other not in the map.
5. Test `insert()` again. This time, I inserted more items to make the map full. After that, if insert, it will throw an exception.
6. Test the `clear()` function, and use `size()` function to check.