Lab 8 - Hash Table

Problem 1. A shop wants to manage a list of n products by using a computer program. Each product is identified by three fields: code (5 numeric characters), name (40 characters maximum) and price (float).

For example, there are 4 products in the list.

code	name	price
10001	Sugar	50000
10002	Salt	7500
10003	Rice	15000
10004	Fish sauce	30000

Write a program which has the following opertions using fixed size array (n) hash table and division function (h(k) = k % n):

a) Add a product to the list. Once a collision takes place, you should use linear or quadratic technique to solve it.
b) Print out the product list.
c) Search for a given product code.
d) Remove a product from the list.

Problem 2. Write a program to store n integers in a chained hash table of 9 memory locations. Use hash function h(k) = k % n. The program should do the tasks as follows:

a) Add a number to the table.
b) Print out the hash table.
c) Search for a given value.
d) Remove a number from the hash table.