Tutorial Task 1

Imagine that you are making an application for a store, and that you are have certain set of items in the store, and each item has its price tac through a bar code. The database might look like this matrix

ItemCode   = [1 2 3 4 5 6 7 8 9 10]'
ItemQuantity   = [100 100 100 100 100 100 100 100 100 100 100]'
ItemPrice   = [12 13 11 10 11 14 10 13 9 10]'

(you can expand the list as you wish)
You are asked to write a small MATLAB/Ocatve code, that will prompt the user to enter the bar code of the item, and calculate the price for the item, and as long as the user entering items, the number of items in the list reduced by the amount of items being bought, and the money is increased by the price of the item.

If there are no more items, or if the item code does not exist, the program should inform the user, that such item is not in the list or it does not exist!

Tutorial Task 2

Memic the operation of a coffee machine, it offers multiple coffee items to the user, by showing a text of the coffee, an ask the user to choose among options, then asks for the money for that coffee, and returns the change if there is a change, or asks for more money if more money is needed.

Add some visual effects, with function disp... Or sprintf .. here is a code sample

```
Welcome to our coffee machine, how can I help you
Esspreso 1, Cappocino 2, Makiato 3
>> (user input) 1
Good choice, our espresso is the best in town, that is 3 KM, please enter
the money
>> (user input) 2
Perfect, we need 1 KM more
>> (user input) 2
Ok, you have 1 KM of change, there you go, and your coffee is being
prepared
……………

Enjoy your coffee
```

Tutorial Task 3

Using input form the user, use for and while loops for the number and the shape provided by the user to make a right triangle shape, With rows and columns of the shape and number chosen.
Sample
Choose a symbol (# $ *) and a number

You need to build a matrix of symbols while looping.

4

#
# #
# # #
# # # #

Choose a symbol (# $ *) and a number
** 5

*
**
***
****
*****

HW Task 1

Adjust the tutorial first task, such that, the user can choose to sell, or refill, then if the choice is to refill, he can adjust the prices, and adjust the number of items in the store.

Harder task (bonus)
Adjust the program so the user can add new items with new codes, prices and numbers if needed.
In this case, you need to think how you can check for the right barcode. (you can use the function **find**)

HW Task 2
Adjust the tutorial second task, so that the user can add amount of sugar, milk, and get more than one coffee.

HW Task 3

Adjust the tutorial third task, so that the user will get his results in 5 different formats

```
*
**
***
****

****
***
**
*

      *
    **
  ***
****

****
 ***
  **
   *


  *
 **
***
****
 ***
  **
   *
```