III.   Part III: After receiving the above program from you, the customer is very happy with your program. He wants to extend the feature of the program to support managing the income of real estate agencies.

- However, a real estate agency is a company, therefore it must inherit from a company.
- A real estate agency has two sources of income: incomeFromStock and incomeFromRealEstate.
- The tax on incomeFromStock uses the same tax rate stockTaxRate as in Part I.
- The tax on incomeFromRealEstate uses a different tax rate realEstateTaxRate.
- Remember when the user changes either stockTaxRate or realEstateTaxRate from the text menu, your program must print out all real estate agencies because their net income is based on both of these tax rates.
- Add the following to the previous program. **Make sure to use observer design pattern to reduce code duplication**

1. Create a class RealEstateTaxRateTable:
   - Contains the following data members with initial values:
     - realEstateTaxRate = 30%
   - Contains the following methods:
     - void setRealEstateTaxRate (double newRealEstateTaxRate):
       - This method sets a new real estate tax rate
       - Print out all objects that affect by realEstateTaxRate, for ex: all RealEstateAgency (see below)

2. Create the following class:
   - Company (an empty class)
   - RealEstateAgency
     - Inherits from Company
     - Contains members:
       - incomeFromStock (double)
       - incomeFromRealEstate (double)
     - Contains methods
       - double getNetIncome (): returns (incomeFromStock + incomeFromRealEstate) – (incomeFromStock * stockTaxRate) - (incomeFromRealEstate * realEstateTaxRate)
       - overload operator << to printout the net income of this RealEstateAgency

3. Add to the main function the following menu:
   - 4 - Create a real estate agency
     - Allow user to input incomeFromRealEstate
     - Create a new object RealEstateAgency
     - Printout the new real estate agency (using the overloaded << method)
   - 7 - Change realEstateTaxRate:
     - Allow user to input the new realEstateTaxRate

- Call the method setRealEstateTaxRate of RealEstateTaxRateTable class