* **Currency Converter Console Application**

The purpose of this assignment is to practice the basic use of classes and composition, you are requested to implement a simple console based application which provides basic currency converter capabilities.

The application shall allow the user to maintain currencies information and the exchange rates, once the application is started, it shall display a menu similar to below:

*Welcome to currency converter, please select an option:*

*1- Insert/update currency information*

*2- Display all currencies*

*3- Display all exchange rates*

*4- Insert/update exchange rate*

*5- Convert an amount value*

If the user enter (1), the application shall prompt the user to enter Currency ISO code, Currency name, and symbol like below:

*Enter currency information in format (ISO,name,Symbol):*

An example of a user entry (without the quotations) is “**USD,US Dollar,$**”, the application shall save those values for the currency, if the currency already exists update existing records.

If the user selects option (2), the application shall display a **formatted** list for all currencies inserted, see example below for an output:

*ISO | Name | Symbol*

*-----+-------------------+------------------*

*USD|US Dollar | $*

*JOD | Jordan Dinar | JOD*

*JPY | Japanese Yen | ¥*

If the user selects option (3), you shall display all exchange rates defined in your application, see example below:

*From | To | Rate*

*-------+-----+-----------*

*USD | JOD| 0.71*

*JOD |USD| 1.41*

If the user selects option (4), you shall prompt the user to enter the exchange rate as below:

*Enter exchange rate in format “ISO From ,ISO To, Rate”:*

An example enter for this would be like (without quotations): “**USD,JOD,0.71**”.

After reading the values from user you shall save those values or update existing data if already inserted.

If the user selects option (5), you shall prompt the user to enter the currency ISO code to convert value from, the ISO currency code to convert value to, and the value as below:

*Please enter the value to exchange in the format (ISO from , ISO to ,Value):*

An example for an enter is (without quotations) “**USD,JOD,230.5**”

The application shall display the value according to previously enter exchange rate, for example if the exchange rate from USD to JOD is 0.71 the conversion for value above shall be “163.55”

**General Consideration and tips:**

* Model the application into separate classes, encapsulate each relevant information and operations in a separate class.
* You can use the currency ISO code as a key(s) while searching or updating data in your application.
* Don’t mix console output and input operations in the same class, introduce a class named Currency Converter, define the methods for searching, listing, and conversion to it, then let another class responsible for communicating with the user (input and output) uses it.
* You can add predefined currencies and exchange rates in your application code.
* After each option selection and result, the main menu shall be displayed again, you can add option (6) for exist.