Teller-Machine.md 6/7/2020

## Teller Machine

- 1. Create a new class that represents a *Teller Machine*.
- 2. Add a manufacturer, deposits, withdrawals, and balance property to the Teller Machine class:
  - o manufacturer: indicates the manufacturer name for the teller machine.
  - o deposits: indicates the total amount that has been deposited into the machine.
  - withdrawals: indicates the total amount that has been withdrawn from the machine.
  - o balance: indicates the net difference between deposits and withdrawals.
- 3. Create a constructor that accepts manufacturer, deposits, and withdrawals.
- 4. Instantiate an object, or objects, in Main(), and use the object(s) to test your methods.
- 5. Create a method that checks to see if a string parameter, cardNumber, is a valid card. The method only returns true under the following conditions:
  - o If the cardNumber begins with a 5 and has 16 digits
  - o If the cardNumber begins with a 4 and has 13 or 16 digits
  - If the cardNumber begins with a 3 and is followed by a 4 or a 7
- 6. Override the ToString() method and have it return "ATM {manufacturer} {balance}" where {manufacturer} and {balance} are placeholders for the actual values. The values from the object should be shown in the string where {variable-name} is indicated.
- 7. Implement unit tests to validate the functionality of:
  - The balance calculation
  - The valid card number method
- 8. In the Program class, within the Main method, read in the provided csv file TellerInput.csv, and use it to populate a list of *Teller Machine* objects.
- 9. Add up the total balance for all of the teller machines in the list, and print it to the screen.