## Description

This program will process bank account checks and prevent a negative balance.

## Requirements

- First, get the initial account balance from the user.
- Second, use a <u>while</u> loop to continually allow the user to enters checks until a <u>negative number</u> such as a -1 is entered for the check (note: Other negative numbers such as -2, -999, -0.5, etc. should also terminate the loop.) Do not let this sentinel value influence your balance.

Implement a simple form of error catching within the loop: If a check were to make the balance go negative (bounce), prevent the check from being deducted from the balance. Instead, display the following message: **Warning: Check will bounce. No transaction occurred.** 

Note: You may not subtract the check from the balance and then add it back in if a negative balance occurs; the balance must always be >= 0.

- Finally, display the remaining balance after the loop has terminated.
- Match the prompts and the output shown in the sample runs below.
- Use the Decimal format class as shown in the notes to properly display the balance with a \$, commas if necessary, and 2 digits of precision.
- Follow all coding guidelines, except the only documentation required is your name above the class.

## **Submission**

- Before arriving to class: Upload and print the source code
- Beginning of class: Turn in the source code.

## Sample Runs

```
Run #1
Please enter a balance: $500
Please enter check amount (-1 to end): $350
Remaining balance: $150.00
Please enter check amount (-1 to end): $50.50
Remaining balance: $99.50
Please enter check amount (-1 to end): $100
Warning: Check will bounce. No transaction occurred.
Please enter check amount (-1 to end): $49.50
Remaining balance: $50.00
Please enter check amount (-1 to end): $-1
Final balance: $50.00
Run #2
Please enter a balance: $2000
Please enter check amount (-1 to end): $1250
Remaining balance: $750.00
Please enter check amount (-1 to end): $1.50
Remaining balance: $748.50
Please enter check amount (-1 to end): $-999
Final balance: $748.50
Run #3
Please enter a balance: $500
Please enter check amount (-1 to end): $-1
Final balance: $500.00
```

Any negative number will terminate the check entry loop – not just -1

Notice that the while loop body is never executed if the user enters the balance, but then decides not to process any checks. (e.g. Remaining balance does not also appear)