1. Draw a representation of the first task in the problem with different examples (make sure one has a cycle in it) to ensure you understand the problem (i.e., don't worry about solving the second part of the assignment):

Example 1: Roommate A owes Roommate B $10.00 and Roommate C $15.00

Graph Representation:

A -10-> B

A -15-> C

Example 2: Roommate A owes Roommate B $10.00, Roommate B owes Roommate C $15.00, and Roommate C owes Roommate A $20.00

Graph Representation:

A -10-> B

B -15-> C

C -20-> A

4. Draw a representation of your approach to the second task with examples (make sure one has a cycle in it) to ensure you understand the problem and how to model a solution:

Example 1: Roommate A owes Roommate B $10.00 and Roommate C $15.00

Graph Representation:

A -25-> B

B -15-> C

Example 2: Roommate A owes Roommate B $10.00, Roommate B owes Roommate C $15.00, and Roommate C owes Roommate A $20.00

Graph Representation:

A -25-> B

B -15-> C

C -5-> A