

tags: Objects, Recursion

Problem

Below is a modification of code from the `Account` class. Read the syntactically valid code provided and debug the method `removePoorParents()`. This method should remove any parent from the chain of parents that has a balance less than 1,000. An `Account` that has their parent `Account` removed should still be able to access the parent of their former parent `Account` (Assuming that parent `Account` has a balance of 1000 or greater.)

Fill in the main method below with code to demonstrate the logical error in `removePoorParents()`. Also fill in the blanks to explain the error.

```
public class Account {
    private Account myParent;
    private int myBalance;
    public Account(int balance, Account parent) {
        this.myBalance = balance;
        this.myParent = parent;
    }
    public void removePoorParents() {
        if (this.myParent != null) {
            if (this.myParent.myBalance < 1000) {
                this.myParent = this.myParent.myParent;
                if (this.myParent == null) {
                    return;
                }
            }
            this.myParent.removePoorParents();
        }
    }
    public static void main(String[] args) {
```

```
/* At this point _____ is _____
 * but it should be _____
 */
}
```