CSC290: Code and Code Review

1. Review the following code, written in Java.

```java
public class Account { // an individual’s bank account
  // principal - in dollars
  // rate - yearly compounded interest rate, at 365.25 per year
  // daysActive - days since last interest payout
  // type - variety of account our bank offers
  double principal, rate;
  int daysActive, accountType;
  public static final int STANDARD = 0, BUDGET = 1, PREMIUM = 2,
  PREMIUM_PLUS = 3;
}
...
public static double calculateFee(Account[] accounts)
{ // return the sum of broker fees for all the given accounts.
  double totalFee = 0.0;
  Account account;
  for (int i = 0; i < accounts.length; i++) {
    account = accounts[i];
    if (account.accountType == Account.PREMIUM || account.accountType
    == Account.PREMIUM_PLUS )
      totalFee += .0125 * ( // 1.25% broker’s fee
        account.principal * Math.pow(account.rate,
        (account.daysActive / 365.25)) - account.principal); // interest-principal
  }
  return totalFee;
}
```

2. On another piece of paper, rewrite the code to address the concerns that you found.