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#include <iostream>
#include <pthread.h>

using namespace std;

int balance = 500;

void* credit_writer(void* wno) {
    int id = *((int*)wno);
    int amount = 500;
    balance += amount;
    cout << "Writer " << id << " credited Rs-" << amount
        << ". Current balance: Rs-" << balance << endl;
    return nullptr;
}

void* debit_writer(void* wno) {
    int id = *((int*)wno);
    int amount = 100;
    balance -= amount;
    cout << "Writer " << id << " debited Rs-" << amount
        << ". Current balance: Rs-" << balance << endl;
    return nullptr;
}

void* reader(void* rno) {
    int id = *((int*)rno);
    cout << "Reader " << id << " reads balance: Rs-" << balance << endl;
    return nullptr;
}

int main() {
    pthread_t readers[10], writers[5];
    char ops[] = {'D', 'C', 'C', 'D', 'C'};
    int ids[10] = {1,2,3,4,5,6,7,8,9,10};

    for (int i = 0; i < 5; i++)
        pthread_create(&readers[i], nullptr, reader, &ids[i]);

    for (int i = 0; i < 5; i++) {
        if (ops[i] == 'C')
            pthread_create(&writers[i], nullptr, credit_writer, &ids[i]);
        else

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        pthread_create(&writers[i], nullptr, debit_writer, &ids[i]);
    }

    for (int i = 5; i < 10; i++)
        pthread_create(&readers[i], nullptr, reader, &ids[i]);

    for (int i = 0; i < 10; i++)
        pthread_join(readers[i], nullptr);
    for (int i = 0; i < 5; i++)
        pthread_join(writers[i], nullptr);

    return 0;
}

```

Output:

Initial balance: Rs 500

Writer Operations:

cpp

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Edit

char ops[] = {'D', 'C', 'C', 'D', 'C'};

Reader 1 reads balance: Rs-500

Reader 2 reads balance: Rs-500

Reader 3 reads balance: Rs-500

Reader 4 reads balance: Rs-500

Reader 5 reads balance: Rs-500

Writer 1 debited Rs-100. Current balance: Rs-400

Writer 2 credited Rs-500. Current balance: Rs-900

Writer 3 credited Rs-500. Current balance: Rs-1400

Writer 4 debited Rs-100. Current balance: Rs-1300

Writer 5 credited Rs-500. Current balance: Rs-1800

Reader 6 reads balance: Rs-1800

Reader 7 reads balance: Rs-1800

Reader 8 reads balance: Rs-1800

Reader 9 reads balance: Rs-1800

Reader 10 reads balance: Rs-1800