```
import sqlite3
# connect to SQLite database
conn = sqlite3.connect(':memory:')
cursor = conn.cursor()
print("establish in-memory database connection")
     establish in-memory database connection
# create users table
cursor.execute('''CREATE TABLE IF NOT EXISTS users (
                    id INTEGER PRIMARY KEY,
                    name TEXT,
                    balance REAL
                )''')
     <sqlite3.Cursor at 0x7d958c3ab340>
# add/insert data
cursor.execute("INSERT INTO users (name, balance) VALUES (?,?)", ('Alice', 1000.0))
cursor.execute("INSERT INTO users (name, balance) VALUES (?,?)", ('Bob', 500.0))
→ <sqlite3.Cursor at 0x7d958c3ab340>
# function to handle transfer funds transaction
def transfer_funds(sender, recipient, amount):
    try:
        # check if transaction is active
        if not conn.in transaction:
            # start transaction
            conn.execute("BEGIN")
        # check if sender has sufficient balance
        cursor.execute("SELECT balance FROM users WHERE name=?", (sender,))
        sender_balance = cursor.fetchone()[0]
        if sender_balance < amount:</pre>
            raise ValueError("Insufficient funds")
        # update sender's balance
        cursor.execute("UPDATE users SET balance = balance - ? WHERE name=?", (amount, sender))
        # update recipient's balance
        cursor.execute("UPDATE users SET balance = balance + ? WHERE name=?", (amount, recipient))
        # commit transaction
        if not conn.in_transaction:
            # commit only if not already in a transaction
            conn.commit()
        print("Transaction successful")
    except Exception as e:
        # rollback transaction if any error occurs
        if not conn.in_transaction:
            # rollback only if not already in a transaction
            conn.rollback()
        print(f"Transaction failed: {e}")
print("created function to handle transfer of funds")
     created function to handle transfer of funds
# perform a fund transfer
transfer funds('Alice', 'Bob', 200.0)
     Transaction successful
# display balances after transaction
cursor.execute("SELECT name, balance FROM users")
print(cursor.fetchall())
     [('Alice', 800.0), ('Bob', 700.0)]
```

# close database connection
conn.close()

print("close database connection")

close database connection

Start coding or  $\underline{\text{generate}}$  with AI.