Part 1: Schedules and Anomalies (10 points)

Consider a database with objects X, Y, and Z and assume that there are two transactions T1 and T2 that attempt the following operations.

T1: R(X), R(Y), W(X)

T2: R(X), R(Y), W(Y), R(X), R(Y), W(X), R(Z), W(Z)

A) Write an example schedule that interleaves operations between T1 and T2, that is NOT conflict serializable.

Answer:
T1: R(X), R(Y), W(X)
T2: R(X), R(Y), W(Y), R(X), R(Y), W(X), R(Z), W(Z)

B) If T1 is instead just "R(X)", this corresponds to T1 just being a single query like

```
SELECT * FROM Flights WHERE id=1024;
```

Do we need a transaction for a single query statement like this? Why or why not?
Answer:
We don't need a transaction for a single query statement like this because a single query statement is a transaction itself.