### **W13**

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#### 1. INTRODUCTION

This week you will learn how to evaluate performance between two journal mode (RBJ and WAL) on SQLite database engine using TPC-C benchmark (pytpcc).

### 2. METHODS

- 1. Run TPC-C benchmark for two journal modes
- Change journal mode to **delete** and **wal**
- 2. Observe how TPS (txn/s) changes
- Record and analyze the TPS for each transaction
  (DELIVERY, NEW\_ORDER, ORDER\_STATUS, PAYMENT, STOCK\_LEVE L)

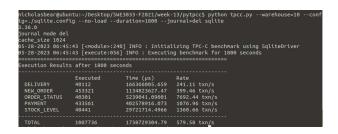
## 3. Performance Evaluation

3.1 Experimental Setup

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Type	Specification
OS	Ubuntu 18.04.65 LTS
CPU	Intel(R) Core(TM) i5-10400F CPU @ 2.90GHz
Memory	3994720 kB
Kernel	Linux ubuntu 5.4.0- 144-genericcat /proc

3.2 Experimental Results

xecution Result	s after 1800 s	econds	
	Executed	Time (µs)	Rate
DELIVERY	76725	197822792.292	387.85 txn/s
NEW ORDER	857157	1179192135.33	726.90 txn/s
ORDER STATUS		5216033.45871	14593.46 txn/s
PAYMENT	818489	273785641.909	2989.52 txn/s
STOCK LEVEL	76384	49811644.3157	1533.46 txn/s



### 4. Conclusion

Total Rate 이 2 배 정도차이가 난다. 그차이는 ORDER STATIS 에서 특히 크게 차이났음을 알 수 있다.