

System Integration Assignment

Write a small application which generates random data and ingests it into a PostgreSQL DB table. The tool should satisfy the following requirements:

- It ingests N batches consisting of M rows per batch with partially randomized data.
- The number of rows per batch can be scaled up to 100k.
- The number of batches can be scaled up to 10k.
- It ingests data as fast as possible by using `COPY ... FROM` preferably.
- Each row matches the following table definition:

Column	Datatype	Explanation	Randomize
ts	BIGINT	Timestamp, microseconds	No
src	BIGINT	Source number	Yes
dst	BIGINT	Destination number	Yes
flags	BIGINT	Flags/Payload	Yes

To measure the performance of the tool, use a rows/s metric which may be obtained by measuring the time needed to ingest data only. The time for generating the data must be omitted.