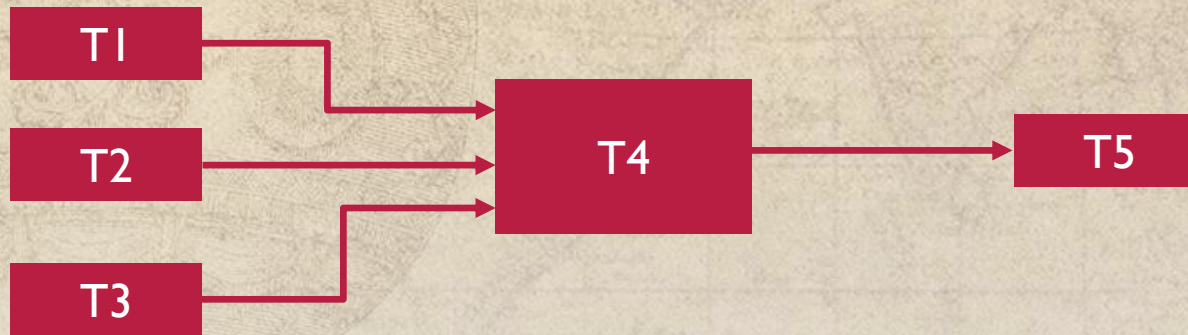# WHAT IS DAG?
(DIRECTED ACYCLIC GRAPH)

By Guha Rajan

DAG

- Is a finite directed graph with no directed cycles.

- In Airflow all workflows are DAGs. A Dag consists of *operators*. An operator defines an individual task that needs to be performed. There are different types of operators available

Airflow key components

DAG	Task	Operators and Sensors
Every workflow is defined as a directed acyclic graph.	A Task is a specific action or operation to be performed	Operators tell something to be performed (send email)
A DAG defines a series of tasks to perform something	For example query a Sales table OR exporting data.	Sensor, trigger operation to be performed (when file exists)
The task can have directional dependencies.	The operators and sensor initiate the work	

https://airflow.apache.org/

DAG operators

- **BashOperator -** executes a bash command.

- **PythonOperator -** calls an arbitrary Python function

- **EmailOperator -** sends an email

- **SimpleHttpOperator -** sends an HTTP request

- **Google Cloud operators, MySqlOperator, SqliteOperator, PostgresOperator, MsSqlOperator, etc**