



# Let's use Operators

It's time to add tasks to the DAG



# Waiting\_file\_task

- First task to execute.
- Sensor Operator
- Loops every 15 seconds to check if the file data.csv is in /home/airflow/first\_dag/



# Fetching\_tweet\_task

- Second task to execute.
- Python Operator
- Executes the “fetching\_tweet.py” script in order to produce the data\_fetched.csv into /tmp/ folder



# Cleaning\_tweet\_task

- Third task to execute
- Python Operator
- Executes the “cleaning\_tweet.py” script in order to produce the data\_cleaned.csv into /tmp/ folder



## Load\_into\_hdfs\_task

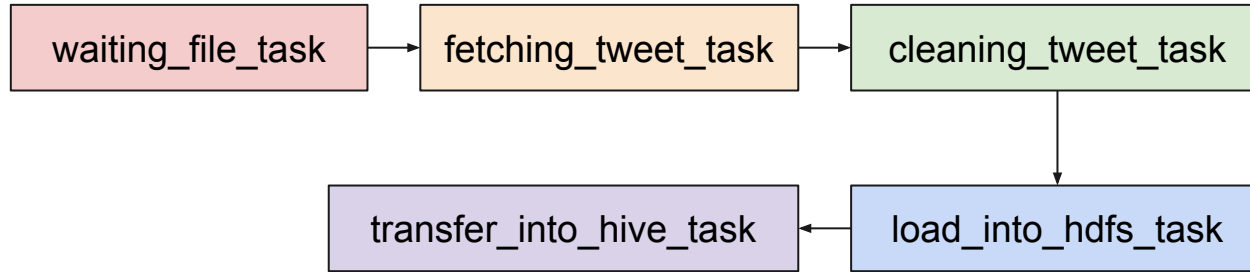
- Fourth task to execute
- Bash Operator
- Uploads the data\_cleaned.csv file into the HDFS at the following location = '/tmp'
- You can type the following command to see if your file is in the directory
  - `hadoop fs -ls /tmp`



## Load\_into\_hive\_task

- Fifth task to execute
- Hive Operator
- Load the data from HDFS to HIVE in order to use SQL to request data.

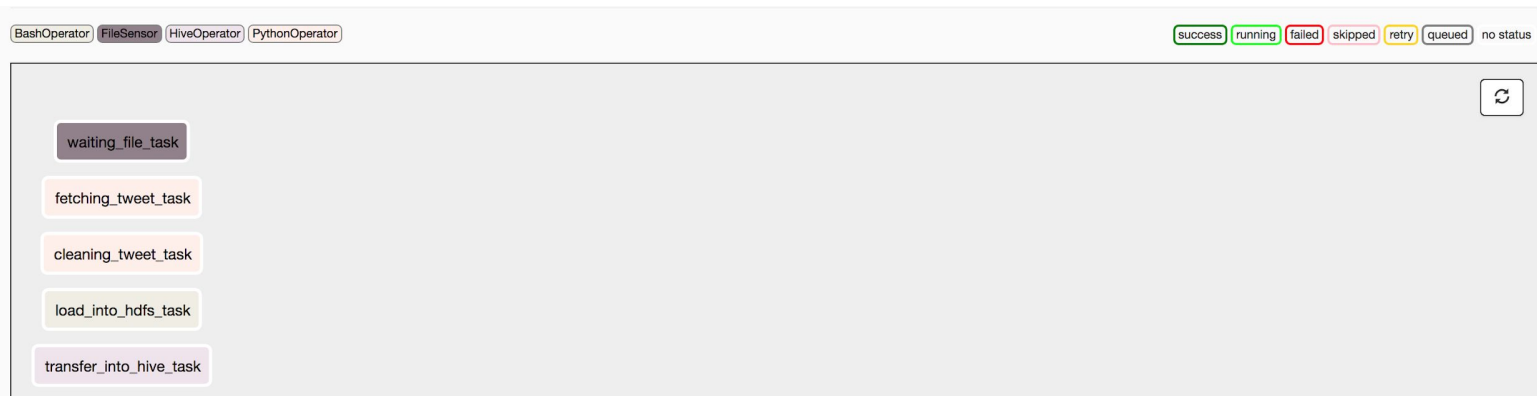
# DAG Schema





# Airflow UI

- Now if you click on your DAG and go to the GraphView from the Airflow UI you should see this:







# What's Next?

- So, what we've done so far?
  - We created python scripts to fetch and clean tweets.
  - We initialized the DAG with default arguments.
  - We initialized different operators according to the tasks we want to achieve.
- As you have seen from previous slides, what we have from the DAG schema differs from the DAG showed into the Airflow UI.
- In the next section we gonna add the missing dependencies.