**Airflow Install and Basic Commands**:

$ export AIRFLOW\_HOME=~/airflow # set directory for airflow ;

set the PYTHONPATH

$pip install apache-airflow # install airflow package

$pip install "apache-airflow[s3, postgres]" #add [subpackages](http://airflow.readthedocs.io/en/latest/installation.html#extra-packages) to be installed.

**Start the airflow meta db and webserver:**

# For the standalone mode, it could be a sqlite database, which applies to sequential executor only

$ airflow initdb

# start the webserver

$ airflow webserver -p 8080

**Access the UI using :**

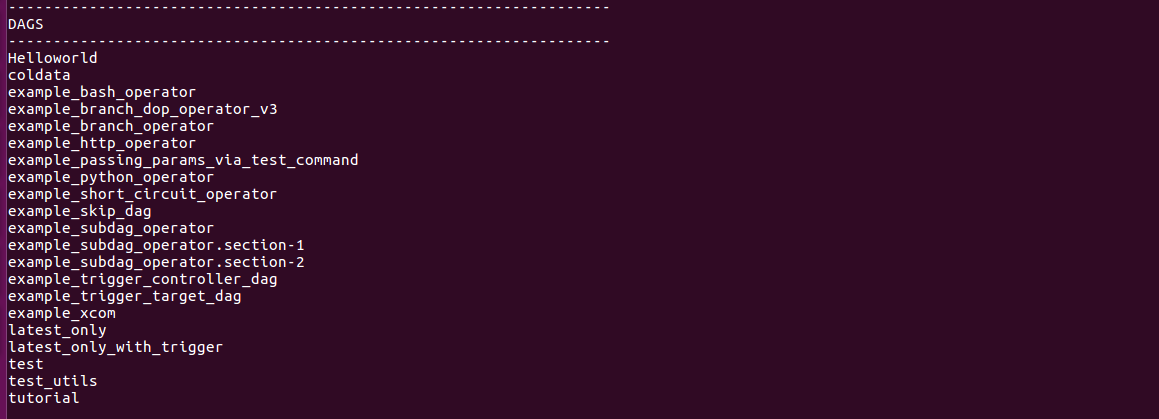
<http://localhost:8080/>

Save python files under the airflow/dags/hello.py

python3 ~/airflow/dags/hello.py # this is the default path

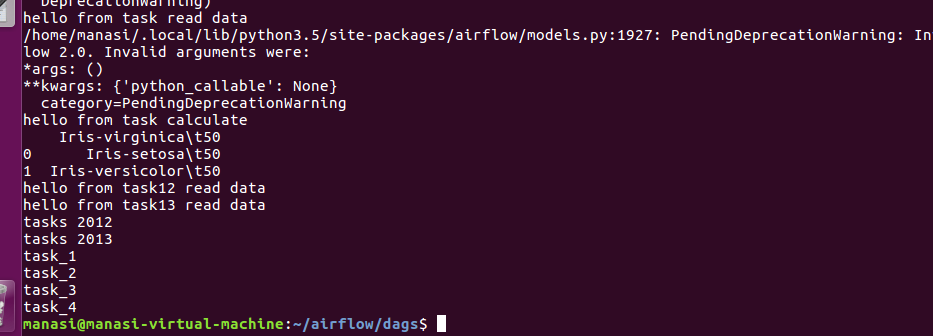
**Airflow Commands**:

# print the list of active DAGs

dags$ airflow list\_dags 

# prints the list of tasks the "Helloworld" dag\_id

airflow list\_tasks tutorial Helloworld



# testing individual tasks in Helloworld

airflow test *Helloworld* 2015-06-01

# once the test run is successful, backfill command is used to consider dependencies, emit log files and communicate with the database.

airflow backfill *Helloworld* -s 2015-06-01 -e 2015-06-07

Visit <https://airflow.incubator.apache.org/tutorial.html> for more information

Airflow pipeline example: [you can run this file with the default sqlite and Sequential Executer. PostGreSql is used to demonstrate the LocalExecutor]

1.Install PostgreSQL :

$ sudo apt-get install postgresql

# Connect to the database:

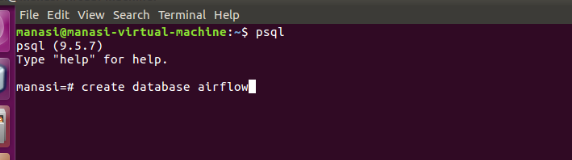
$ psql

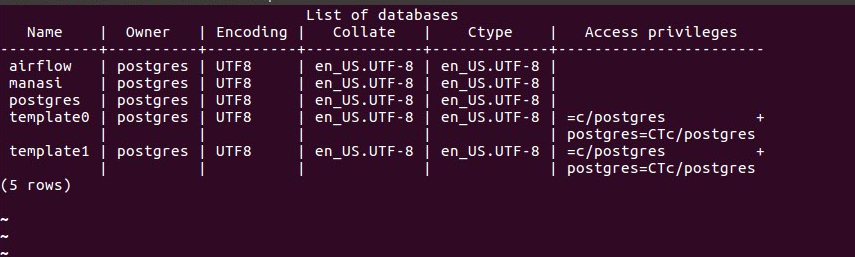
# Create a meta db for airflow:

manasi=# create database airflow

# Check if the database is created :

manasi=# \l





2. Install psycopg2:

$ pip install psycopg2 #install using pip package

Check the Build Requisites part of the [document](http://initd.org/psycopg/docs/install.html) in case of errors.

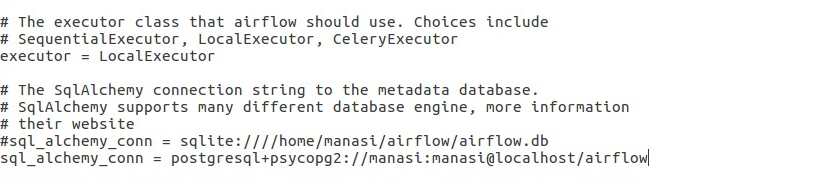
3. Modify the configuration in AIRFLOW\_HOME/airflow.cfg

# Change the executor to Local Executor

*executor = LocalExecutor*

# Change the meta db configuration. Note: the postgres username and password do not matter for now, since the database server and clients are still on the same host

*sql\_alchemy\_conn = postgresql+psycopg2://your\_postgres\_user\_name:your\_postgres\_password@host\_name/database\_name*



4.Restart airflow and test your dags:

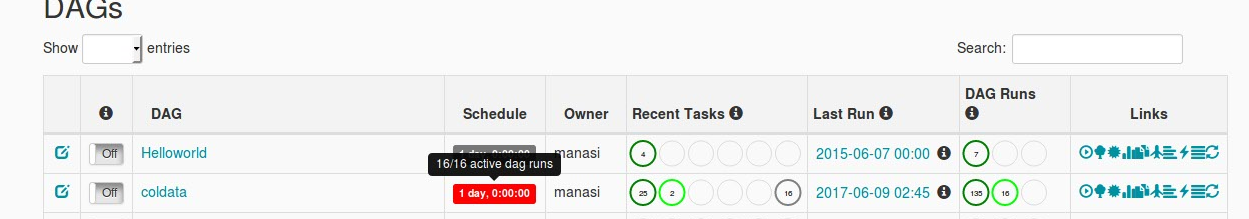
$ airflow initdb

$ airflow scheduler

$ airflow webserver

5.Run the Dag from the UI:

5.1 Load the UI: <http://localhost:8080> . The coldata dag will be listed in the dag list. change the off sign to on.



5.2 In order to start a DAG Run, first turn the workflow on (blue arrow), then click the Trigger Dag button (purple arrow) and finally, click on the Graph View (red arrow) to see the progress of the run.

Refer the demo video : [airflow\_part1](https://youtu.be/Qs02p3mh8m4)  [airflow\_part2](https://youtu.be/83gPOMr6NOE)

In case of of any doubts or issues do let us know so we can keep the document updated and help others.