Table in mysql DB

CREATE TABLE book_assesmnt (title VARCHAR(255) ,sub_tittle VARCHAR(255) ,isbn VARCHAR(255),price VARCHAR(255), PRIMARY KEY(isbn));

Airflow operator

```
import json
import csv
import requests
import MySQLdb
import re
from http.client import responses
from jsonpath_ng import jsonpath, parse as jparse

from airflow.models import BaseOperator
from airflow.utils.decorators import apply_defaults
from airflow.exceptions import AirflowException


class BookStoreOperator(BaseOperator):

    def __init__(self, api_url: str, req_type = "GET", output_csv = "", json_path: str = None, api_headers: dict = None, pay_load: dict = None, mapping: dict = None, *args, **kwargs):
        super().__init__(*args, **kwargs)
        self.api_url = api_url
        self.req_type = req_type
        self.output_csv = output_csv
        self.json_path = json_path
        self.api_headers = api_headers
        self.pload = pay_load
        self.mapping = mapping


    def execute(self, context):
        mydb = MySQLdb.connect(host='localhost',
            user='root',
            passwd='root',
            db='bookStore')

        cursor = mydb.cursor()
        response = requests.request(self.req_type, self.api_url ,headers = self.api_headers,data = self.pload)

        sucess_range = re.search(r'2[0-9][0-9]', str(response.status_code))
        if not (sucess_range):
            raise AirflowException("Response status code is " + str(response.status_code) + " and response status is "'+ responses[response.status_code]+"'")

        data = response.json()
```

```
        jsonpath_expression = jparse(self.json_path)

        match = jsonpath_expression.find(data)


        if len(match) > 0:

            result = match[0].value

        else:
            raise AirflowException('can not get match')

        # now we will open a file for writing
        data_file = open(self.output_csv, 'w')

        # create the csv writer object
        csv_writer = csv.writer(data_file)


        # Writing headers of CSV file
        header = self.mapping.keys()
        csv_writer.writerow(header)

        for values_in_result in result:

            row = []
            #csv_writer.writerow(mapping.values())
            for each_value in self.mapping.values():

                jsonpath_exp = jparse(each_value)
                matcher = jsonpath_exp.find(values_in_result)

                mapping_value = ''
                if len(matcher) > 0:
                    mapping_value = matcher[0].value

                row.append(mapping_value)
            csv_writer.writerow(row)
            try:
                cursor.execute('INSERT INTO book_assesmnt VALUES(%s, %s, %s,%s)',row)
            except Exception as e:
                print('Could not save', str(e))
#close the connection to the database.
        mydb.commit()
        cursor.close()

        data_file.close()

        return True
```

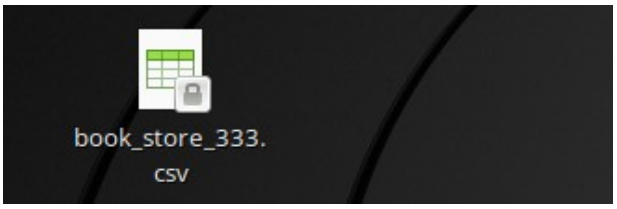
Dag

```
from datetime import timedelta
import airflow
from airflow import DAG
from airflow.operators.book_store_operator import BookStoreOperator
import pendulum
from datetime import datetime
from airflow.models import Variable

local_tz = pendulum.timezone("Australia/Sydney")


default_args = {
        'owner': 'cfy',
        'depends_on_past': False,
        'start_date': airflow.utils.dates.days_ago(1),
        'email': ['prasadi.jayakodi@novigi.com.au'],
        'email_on_failure': True,
        'email_on_retry': True,
        'retries': 0,
        'retry_delay': timedelta(minutes=5)
}

dag = DAG('dag_book_store',
        default_args=default_args,
        schedule_interval="50 22 * * *",
        tags=['json', 'to_csv'])

t0 = BookStoreOperator(
        task_id='dag_book_store',
        api_url= 'https://api.itbook.store/1.0/new',
        req_type= 'GET',
        output_csv= '/home/prasadi/Desktop/book_store_333.csv',
        json_path = '$.books',
        api_headers= '',
        pay_load= '',
        mapping= {'TITTLE' : '$.title','SUB_TITTLE' : '$.subtitle','ISBN' :
'$.isbn13','PRICE' : '$.price'},
        dag=dag,
        auto_commit=True)

t0
```

Data inserted to db

```
mysql> select * from book_assesmnt;
+--------------------------------------+-----------------------------------------------------------------------------------------------------+---------------+--------+
| title                                | sub_tittle                                                                                          | isbn          | price  |
+--------------------------------------+-----------------------------------------------------------------------------------------------------+---------------+--------+
| Fundamentals of C++ Programming      |                                                                                                     | 1001590483252 | $0.00  |
| Fundamentals of Python Programming   |                                                                                                     | 1001590485785 | $0.00  |
| Machine Learning Yearning            | Technical Strategy for AI Engineers, In the Era of Deep Learning                                    | 1001590486081 | $0.00  |
| Full Speed Python                    |                                                                                                     | 1001592395975 | $0.00  |
| DevOps: WTF?                         |                                                                                                     | 1001592565453 | $0.00  |
| The Basics of User Experience Design |                                                                                                     | 1001601301730 | $0.00  |
| 3D Game Development with LWJGL 3     | Learn the main concepts involved in writing 3D games using the Lighweight Java Gaming Library       | 1001601302020 | $0.00  |
| Coffee Break Python Slicing          | 24 Workouts to Master Slicing in Python, Once and for All                                           | 1001605784161 | $0.00  |
| Operating Systems: From 0 to 1       |                                                                                                     | 1001606140658 | $0.00  |
| Java Web Scraping Handbook           | Learn advanced Web Scraping techniques                                                              | 1001606140805 | $0.00  |
| Graph Databases For Beginners        | The #1 Platform for Connected Data                                                                  | 1001606307637 | $0.00  |
| Elementary Algorithms                |                                                                                                     | 1001606307729 | $0.00  |
| Windows PowerShell Networking Guide  |                                                                                                     | 1001606307964 | $0.00  |
| The Node.js Handbook                 |                                                                                                     | 1001614599609 | $0.00  |
| The Vue.js Handbook                  |                                                                                                     | 1001615902053 | $0.00  |
| How To Code in Python 3              |                                                                                                     | 9780999773017 | $0.00  |
| Operating System Concepts, 10th Edition |                                                                                                  | 9781119456339 | $90.08 |
| Learn Programming                    | Your Guided Tour Through the Programming Jungle                                                     | 9781722834920 | $16.83 |
| Azure Tips and Tricks                |                                                                                                     | 9781732704121 | $0.00  |
| Neural Networks and Deep Learning    | A Textbook                                                                                          | 9783319944623 | $33.99 |
+--------------------------------------+-----------------------------------------------------------------------------------------------------+---------------+--------+
20 rows in set (0.00 sec)
```

CSV file created in given location



book_store_333.csv (read-only) - LibreOffice Calc

File Edit View Insert Format Styles Sheet Data Tools Window Help

A1 TITTLE

This document is open in read-only mode. Edit Document

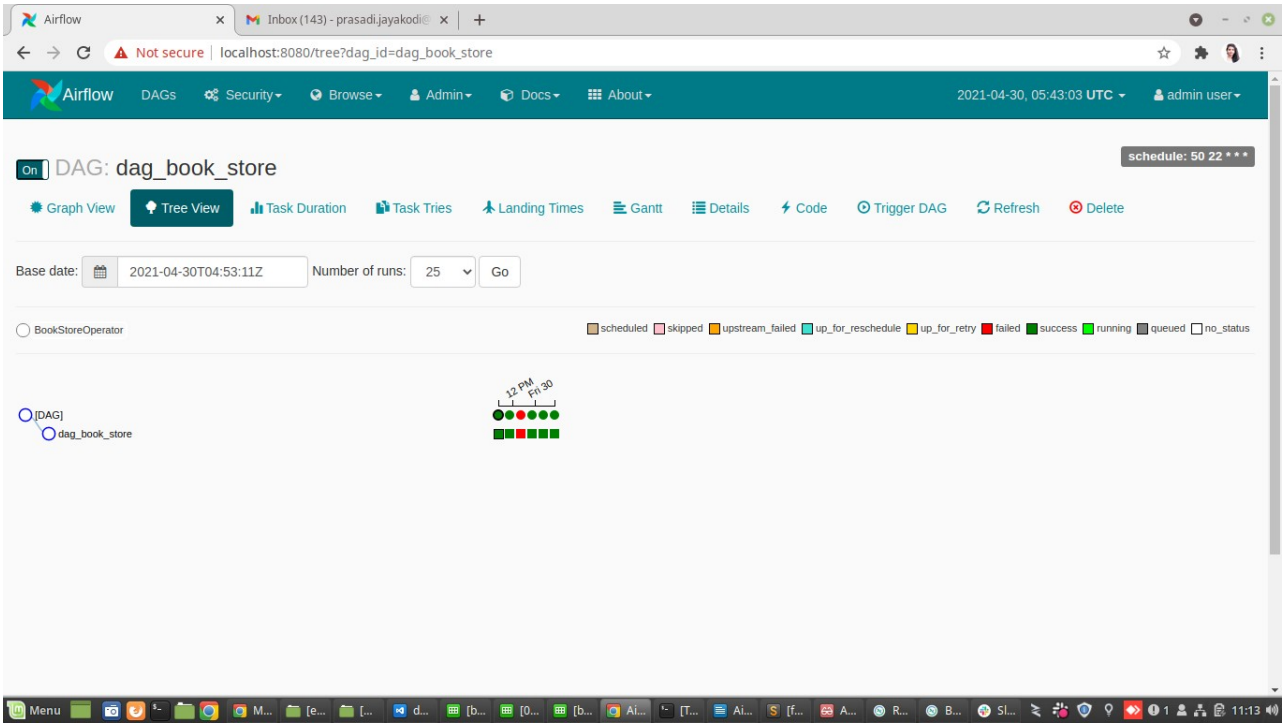
	A	B	C	D	E	F	G	H
1	TITTLE	SUB_TITTLE	ISBN	PRICE				
2	The Vue.js Handbook		1001615902053	$0.00				
3	The Node.js Handbook		1001614599609	$0.00				
4	Azure Tips and Tricks		9781732704121	$0.00				
5	Learn Programming	Your Guided Tour Through the Programming Jungle	9781722834920	$16.83				
6	Graph Databases For Beginners	The #1 Platform for Connected Data	1001606307637	$0.00				
7	Elementary Algorithms		1001606307729	$0.00				
8	Windows PowerShell Networking Guide		1001606307964	$0.00				
9	Operating Systems: From 0 to 1		1001606140658	$0.00				
10	Java Web Scraping Handbook	Learn advanced Web Scraping techniques	1001606140805	$0.00				
11	Coffee Break Python Slicing	24 Workouts to Master Slicing in Python, Once and for All	1001605784161	$0.00				
12	The Basics of User Experience Design		1001601301730	$0.00				
13	3D Game Development with LWJGL 3	Learn the main concepts involved in writing 3D games using the Lighweight Java Gaming Library	1001601302020	$0.00				
14	DevOps: WTF?		1001592565453	$0.00				
15	Full Speed Python		1001592395975	$0.00				
16	How To Code in Python 3		9780999773017	$0.00				
17	Operating System Concepts, 10th Edition		9781119456339	$90.08				
18	Neural Networks and Deep Learning	A Textbook	9783319944623	$33.99				
19	Fundamentals of C++ Programming		1001590483252	$0.00				
20	Fundamentals of Python Programming		1001590485785	$0.00				
21	Machine Learning Yearning	Technical Strategy for AI Engineers, In the Era of Deep Learning	1001590486081	$0.00				
22								
23								
24								
25								
26								
27								
28								
29								

book_store_333

Sheet 1 of 1 | Default | Average: ; Sum: 0 | 100%

Menu [MySQ... [exam... [Asses... [dag_b... [book_... [01.csv... book_s... [Airflo... [Termi... Untitle... [from ... 10:49

Airflow UI


Airflow
Inbox (143) - prasadi.jayakodi@
Not secure
localhost:8080/tree?dag_id=dag_book_store
Airflow
DAGs
Security
Browse
Admin
Docs
About
2021-04-30, 05:43:03 UTC
admin user
On
DAG: dag_book_store
schedule: 50 22 * * *
Graph View
Tree View
Task Duration
Task Tries
Landing Times
Gantt
Details
Code
Trigger DAG
Refresh
Delete
Base date:
2021-04-30T04:53:11Z
Number of runs:
25
Go
BookStoreOperator
scheduled
skipped
upstream_failed
up_for_reschedule
up_for_retry
failed
success
running
queued
no_status
12 PM
Fri 30
[DAG]
dag_book_store
Menu
11:13