File   Edit   Search   View   Format   Encoding   Syntax   Special Tools

HW_7_dag_sem.py

```python
1  from airflow import DAG
2  from airflow.operators.bash import BashOperator
3  from airflow.operators.python import PythonOperator, BranchPythonOperator
4  from datetime import datetime, timedelta
5  import pendulum
6  import requests
7
8  #Weather
9  def hw_7_get_temp(**kwargs):
10
11     ti = kwargs['ti']
12
13     city = "Vladivostok"
14
15     api_key = "7f1baa1d74ab9d393b97eab4b600ef44"
16
17     url = f"https://api.openweathermap.org/data/2.5/weather?q={city}&appid={api_key}"
18
19     payload = {}
20
21     headers = {}
22
23     response = requests.request("GET", url, headers=headers, data=payload)
24
25     # ti.xcom_push(key='hw_7_open_weather', value=round(float(response.json()['main']['temp'])-273.15, 2)
26
27     return round(float(response.json()['main']['temp'])-273.15, 2)
28
29
30  def hw_7_check_temp(ti):
31
32     temp = int(ti.xcom_pull(task_ids='hw_7_get_temperature_task'))
33
34     print(f'Temperature now is {temp}')
35
36     if temp >= 15:
37
38         return 'hw_7_print_warm'
39
40     else:
41
42         return 'hw_7_print_cold'
43
44
45  with DAG(
46
47     'hw_7_weather_check_warm_or_cold',
48
49     start_date=datetime(2024, 1, 1),
50
51     catchup=False,
52
```

```python
        return 'hw_7_print_cold'


with DAG(
    'hw_7_weather_check_warm_or_cold',
    start_date=datetime(2024, 1, 1),
    catchup=False,
    tags=['homework_ETL'],
) as dag:
    hw_7_get_temperature_task = PythonOperator(
        task_id='hw_7_get_temperature_task',
        python_callable=hw_7_get_temp,
    )
    hw_7_check_temperature_task = BranchPythonOperator(
        task_id='hw_7_check_temperature_task',
        python_callable=hw_7_check_temp,
    )
    hw_7_print_warm = BashOperator(
        task_id='hw_7_print_warm',
        bash_command='echo "It is warm"',
    )
    hw_7_print_cold = BashOperator(
        task_id='hw_7_print_cold',
        bash_command='echo "It is cold"',
    )

    hw_7_get_temperature_task >> hw_7_check_temperature_task >> [
        hw_7_print_warm, hw_7_print_cold]
```

03:15 UTC

DAGs

DAGs

| All 6 | Active 6 | Paused 0 | | Running 0 | Failed 0 | | Filter DAGs by tag | | Search DAGs | | Auto-refresh |

	DAG	Owner	Runs	Schedule	Last Run	Next Run	Recent Tasks	Actions
⬤	**AGanshin001**	AGanshin	2	0 6 * * *	2024-04-23, 03:00:00	2024-04-24, 03:00:00	1	▶ 🗑
⬤	**Lesnykh001**	Lesnykh	4	0 6 * * *	2024-04-23, 03:00:00	2024-04-24, 03:00:00	2	▶ 🗑
⬤	**hello_pay**	airflow	1	0 12 * * *	2024-04-22, 12:00:00	2024-04-23, 12:00:00	1	▶ 🗑
⬤	**hello_world**	airflow	1	0 12 * * *	2024-04-22, 12:00:00	2024-04-23, 12:00:00	2 1	▶ 🗑
⬤	**hello_world1**	airflow	1	0 12 * * *	2024-04-22, 12:00:00	2024-04-23, 12:00:00	3	▶ 🗑
⬤	**hw_7_weather_check_warm_or_cold** homework_ETL	airflow	1	1 day, 0:00:00	2024-04-23, 02:51:20	2024-04-24, 02:51:20	3 1	▶ 🗑

« ‹ 1 › »

Showing **1-6** of **6** DAGs

Version: v2.7.3
Git Version: .release:f1243537838516b8bb8156130bc001595bfbeb01

Airflow   DAGs   Cluster Activity   Datasets   Security ▾   Browse ▾   Admin ▾   Docs ▾   03:17 UTC ▾   AA ▾

Schedule: 1 day, 0:00:00 | Next Run: 2024-04-24, 02:51:20

DAG: hw_7_weather_check_warm_or_cold

| ▦ Grid | ⬚ Graph | 📅 Calendar | ⏳ Task Duration | ⇄ Task Tries | ⬏ Landing Times | ≡ Gantt | ⚠ Details | <> Code | 🔍 Audit Log | ▶ 🗑

| 24.04.2024 03:17:42 📅 | 25 ▾ | All Run Types ▾ | All Run States ▾ | **Clear Filters** | Auto-refresh ⬤

Press `shift` + `/` for Shortcuts   deferred failed queued removed restarting running scheduled skipped success up_for_reschedule up_for_retry upstream_failed no_status

«

DAG
hw_7_weather_check_warm_or_cold

| ⚠ Details | ⬚ Graph | ≡ Gantt | <> Code |

Duration

00:00:05

00:00:02

00:00:00

hw_7_get_temperature_task
hw_7_check_temperature_task
hw_7_print_cold
hw_7_print_warm

DAG Runs Summary

Total Runs Displayed	1
■ Total success	1
First Run Start	2024-04-24, 02:51:40 UTC
Last Run Start	2024-04-24, 02:51:40 UTC
Max Run Duration	00:00:05
Mean Run Duration	00:00:05
Min Run Duration	00:00:05

DAG Summary

1 новое уведомление

Airflow   DAGs   Cluster Activity   Datasets   Security ▾   Browse ▾   Admin ▾   Docs ▾

03:18 UTC ▾   AA

⊞ Grid   ▪️ Graph   📅 Calendar   ⏳ Task Duration   ⇄ Task Tries   Landing Times   ☰ Gantt   ⚠ Details   <> Code   🔍 Audit Log

24.04.2024 03:17:42 | 25 ▾ | All Run Types ▾ | All Run States ▾ | **Clear Filters**

Auto-refresh ⬤

Press `shift` + `/` for Shortcuts

deferred   failed   queued   removed   restarting   running   scheduled   skipped   success   up_for_reschedule   up_for_retry   upstream_failed   no_status

Duration

00:00:05

00:00:02

00:00:00

hw_7_get_temperature_task
hw_7_check_temperature_task
hw_7_print_cold
hw_7_print_warm

DAG
hw_7_weather_check_warm_or_cold / 🕐 **2024-04-24, 02:51:20 UTC** / **Task**
hw_7_get_temperature_task

Clear task   **Mark state as... ▾**   **Filter Tasks ▾**

⚠ Details   ▪️ Graph   ▤ Gantt   <> Code   ☰ Logs

Layout:

Left -> Right ▾

hw_7_get_temperature_task
■ success
PythonOperator

hw_7_check_temperature_t...
■ success
BranchPythonOperator

hw_7_print_cold
■ success
BashOperator

hw_7_print_warm
■ skipped
BashOperator

+
−

Airflow   DAGs   Cluster Activity   Datasets   Security ⌄   Browse ⌄   Admin ⌄   Docs ⌄   03:19 UTC ⌄   AA ⌄

⊞ Grid   ᵗᴴ Graph   📅 Calendar   ⌛ Task Duration   ⇄ Task Tries   📊 Landing Times   ☰ Gantt   ⚠ Details   <> Code   📋 Audit Log   ▶ 🗑

24.04.2024 03:17:42 📅   25 ⌄   All Run Types ⌄   All Run States ⌄   **Clear Filters**   Auto-refresh ⬤

Press shift + / for Shortcuts   deferred failed queued removed restarting running scheduled skipped success up_for_reschedule up_for_retry upstream_failed no_status

« »   **DAG**   **Run**   **Task**   Clear task   Mark state as... ⌄   Filter Tasks ⌄
       hw_7_weather_check_warm_or_cold / ⊙ 2024-04-24, 02:51:20 UTC / hw_7_get_temperature_task

Duration   ⚠ Details   ᵗᴴ Graph   📄 Gantt   <> Code   ☰ Logs

00:00:05   (by attempts)

00:00:02   1

00:00:00   All Levels ⌄   All File Sources ⌄   ☐ Wrap   Download   See More

hw_7_get_temperature_task ▮   MSI.
hw_7_check_temperature_task ▮   *** Found local files:
hw_7_print_cold   ▮   ***   * /home/airflow/logs/dag_id=hw_7_weather_check_warm_or_cold/run_id=scheduled__2024-04-23T02:51:20.311091+00:00/task_id=hw_7_get_temperature_task/attempt=1.log
hw_7_print_warm   ▮   [2024-04-24, 02:51:40 UTC] {taskinstance.py:1159} INFO - Dependencies all met for dep_context=non-requeueable deps ti=<TaskInstance: hw_7_weather_check_warm_or_cold.hw_7_get_temperature_task
                                [2024-04-24, 02:51:40 UTC] {taskinstance.py:1159} INFO - Dependencies all met for dep_context=requeueable deps ti=<TaskInstance: hw_7_weather_check_warm_or_cold.hw_7_get_temperature_task sch
                                [2024-04-24, 02:51:40 UTC] {taskinstance.py:1361} INFO - Starting attempt 1 of 1
                                [2024-04-24, 02:51:40 UTC] {taskinstance.py:1382} INFO - Executing <Task(PythonOperator): hw_7_get_temperature_task> on 2024-04-23 02:51:20.311091+00:00
                                [2024-04-24, 02:51:40 UTC] {standard_task_runner.py:57} INFO - Started process 106651 to run task
                                [2024-04-24, 02:51:40 UTC] {standard_task_runner.py:84} INFO - Running: ['airflow', 'tasks', 'run', 'hw_7_weather_check_warm_or_cold', 'hw_7_get_temperature_task', 'scheduled__2024-04-23T02:
                                [2024-04-24, 02:51:40 UTC] {standard_task_runner.py:85} INFO - Job ***03: Subtask hw_7_get_temperature_task
                                [2024-04-24, 02:51:40 UTC] {task_command.py:416} INFO - Running <TaskInstance: hw_7_weather_check_warm_or_cold.hw_7_get_temperature_task scheduled__2024-04-23T02:51:20.311091+00:00 [running]
                                [2024-04-24, 02:51:40 UTC] {taskinstance.py:1662} INFO - Exporting env vars: AIRFLOW_CTX_DAG_OWNER='airflow' AIRFLOW_CTX_DAG_ID='hw_7_weather_check_warm_or_cold' AIRFLOW_CTX_TASK_ID='hw_7_ge
                                [2024-04-24, 02:51:42 UTC] {python.py:194} INFO - Done. Returned value was: 7.01
                                [2024-04-24, 02:51:42 UTC] {taskinstance.py:1400} INFO - Marking task as SUCCESS. dag_id=hw_7_weather_check_warm_or_cold, task_id=hw_7_get_temperature_task, execution_date=20240423T025***20,
                                [2024-04-24, 02:51:42 UTC] {local_task_job_runner.py:228} INFO - Task exited with return code 0
                                [2024-04-24, 02:51:42 UTC] {taskinstance.py:2778} INFO - 1 downstream tasks scheduled from follow-on schedule check

Airflow   DAGs   Cluster Activity   Datasets   Security ▾   Browse ▾   Admin ▾   Docs ▾   03:19 UTC ▾   AA

Grid   Graph   Calendar   Task Duration   Task Tries   Landing Times   Gantt   Details   <> Code   Audit Log   ▶   🗑

24.04.2024 03:17:42   📅   25 ▾   All Run Types ▾   All Run States ▾   **Clear Filters**   Auto-refresh ⬤

Press `shift` + `/` for Shortcuts   deferred   failed   queued   removed   restarting   running   scheduled   skipped   success   up_for_reschedule   up_for_retry   upstream_failed   no_status

« »   **DAG**   **Run**   **Task**
hw_7_weather_check_warm_or_cold / 🕐2024-04-24, 02:51:20 UTC / hw_7_check_temperature_task   Clear task   Mark state as... ▾   Filter Tasks ▾

Details   Graph   Gantt   <> Code   Logs

Duration
00:00:05

00:00:02

00:00:00

hw_7_get_temperature_task
hw_7_check_temperature_task
hw_7_print_cold
hw_7_print_warm

Layout:
Left -> Right ▾

hw_7_get_temperature_task
■ success
PythonOperator

hw_7_check_temperature_t...
■ success
BranchPythonOperator

hw_7_print_cold
■ success
BashOperator

hw_7_print_warm
■ skipped
BashOperator

Airflow DAGs Cluster Activity Datasets Security ▾ Browse ▾ Admin ▾ Docs ▾   03:20 UTC ▾   AA ▾

Press `shift` + `/` for Shortcuts

deferred failed queued removed restarting running scheduled skipped success up_for_reschedule up_for_retry upstream_failed no_status

« »

DAG
hw_7_weather_check_warm_or_cold /

Run
🕐 2024-04-24, 02:51:20 UTC /

Task
hw_7_check_temperature_task

Clear task   Mark state as... ▾   Filter Tasks ▾

Duration

00:00:05

00:00:02

00:00:00

hw_7_get_temperature_task
hw_7_check_temperature_task
hw_7_print_cold
hw_7_print_warm

⚠ Details   🔧 Graph   📊 Gantt   <> Code   ☰ Logs

(by attempts)

1

All Levels ▾   All File Sources ▾   ☐ Wrap   Download   See More

```
MSI.
*** Found local files:
***   * /home/airflow/logs/dag_id=hw_7_weather_check_warm_or_cold/run_id=scheduled__2024-04-23T02:51:20.311091+00:00/task_id=hw_7_check_temperature_task/attempt=1.log
[2024-04-24, 02:51:43 UTC] {taskinstance.py:1159} INFO - Dependencies all met for dep_context=non-requeueable deps ti=<TaskInstance: hw_7_weather_check_warm_or_cold.hw_7_check_temperature_ta
[2024-04-24, 02:51:43 UTC] {taskinstance.py:1159} INFO - Dependencies all met for dep_context=requeueable deps ti=<TaskInstance: hw_7_weather_check_warm_or_cold.hw_7_check_temperature_task s
[2024-04-24, 02:51:43 UTC] {taskinstance.py:1361} INFO - Starting attempt 1 of 1
[2024-04-24, 02:51:43 UTC] {taskinstance.py:1382} INFO - Executing <Task(BranchPythonOperator): hw_7_check_temperature_task> on 2024-04-23 02:51:20.311091+00:00
[2024-04-24, 02:51:43 UTC] {standard_task_runner.py:57} INFO - Started process 106666 to run task
[2024-04-24, 02:51:43 UTC] {standard_task_runner.py:84} INFO - Running: ['airflow', 'tasks', 'run', 'hw_7_weather_check_warm_or_cold', 'hw_7_check_temperature_task', 'scheduled__2024-04-23TO
[2024-04-24, 02:51:43 UTC] {standard_task_runner.py:85} INFO - Job ***04: Subtask hw_7_check_temperature_task
[2024-04-24, 02:51:43 UTC] {task_command.py:416} INFO - Running <TaskInstance: hw_7_weather_check_warm_or_cold.hw_7_check_temperature_task scheduled__2024-04-23T02:51:20.311091+00:00 [runnin
[2024-04-24, 02:51:43 UTC] {taskinstance.py:1662} INFO - Exporting env vars: AIRFLOW_CTX_DAG_OWNER='airflow' AIRFLOW_CTX_DAG_ID='hw_7_weather_check_warm_or_cold' AIRFLOW_CTX_TASK_ID='hw_7_ch
[2024-04-24, 02:51:43 UTC] {logging_mixin.py:154} INFO - Temperature now is 7
[2024-04-24, 02:51:43 UTC] {python.py:194} INFO - Done. Returned value was: hw_7_print_cold
[2024-04-24, 02:51:43 UTC] {python.py:227} INFO - Branch callable return hw_7_print_cold
[2024-04-24, 02:51:43 UTC] {skipmixin.py:173} INFO - Following branch hw_7_print_cold
[2024-04-24, 02:51:43 UTC] {skipmixin.py:239} INFO - Skipping tasks [('hw_7_print_warm', -1)]
[2024-04-24, 02:51:43 UTC] {taskinstance.py:1400} INFO - Marking task as SUCCESS. dag_id=hw_7_weather_check_warm_or_cold, task_id=hw_7_check_temperature_task, execution_date=20240423T025***2
[2024-04-24, 02:51:43 UTC] {local_task_job_runner.py:228} INFO - Task exited with return code 0
[2024-04-24, 02:51:43 UTC] {taskinstance.py:2778} INFO - 1 downstream tasks scheduled from follow-on schedule check
```

Airflow

DAGs **Cluster Activity** **Datasets** **Security** ⌄ **Browse** ⌄ **Admin** ⌄ **Docs** ⌄

03:21 UTC ⌄ AA ⌄

Press `shift` + `/` for Shortcuts

| deferred | failed | queued | removed | restarting | running | scheduled | skipped | success | up_for_reschedule | up_for_retry | upstream_failed | no_status |

DAG
hw_7_weather_check_warm_or_cold /
Run
🕐2024-04-24, 02:51:20 UTC /
Task
hw_7_print_cold

Clear task **Mark state as...** ⌄ **Filter Tasks** ⌄

⚠ **Details**   📊 **Graph**   📋 **Gantt**   `<>` **Code**   ☰ **Logs**

Duration

00:00:05

00:00:02

00:00:00

hw_7_get_temperature_task
hw_7_check_temperature_task
hw_7_print_cold
hw_7_print_warm

(by attempts)

1

All Levels ⌄   All File Sources ⌄   ☐ Wrap   Download   See More

```
MSI.
*** Found local files:
***   * /home/airflow/logs/dag_id=hw_7_weather_check_warm_or_cold/run_id=scheduled__2024-04-23T02:51:20.311091+00:00/task_id=hw_7_print_cold/attempt=1.log
[2024-04-24, 02:51:44 UTC] {taskinstance.py:1159} INFO - Dependencies all met for dep_context=non-requeueable deps ti=<TaskInstance: hw_7_weather_check_warm_or_cold.hw_7_print_cold scheduled
[2024-04-24, 02:51:44 UTC] {taskinstance.py:1159} INFO - Dependencies all met for dep_context=requeueable deps ti=<TaskInstance: hw_7_weather_check_warm_or_cold.hw_7_print_cold scheduled__20
[2024-04-24, 02:51:44 UTC] {taskinstance.py:1361} INFO - Starting attempt 1 of 1
[2024-04-24, 02:51:44 UTC] {taskinstance.py:1382} INFO - Executing <Task(BashOperator): hw_7_print_cold> on 2024-04-23 02:51:20.311091+00:00
[2024-04-24, 02:51:44 UTC] {standard_task_runner.py:57} INFO - Started process 106672 to run task
[2024-04-24, 02:51:44 UTC] {standard_task_runner.py:84} INFO - Running: ['airflow', 'tasks', 'run', 'hw_7_weather_check_warm_or_cold', 'hw_7_print_cold', 'scheduled__2024-04-23T02:5***:20.3*
[2024-04-24, 02:51:44 UTC] {standard_task_runner.py:85} INFO - Job ***05: Subtask hw_7_print_cold
[2024-04-24, 02:51:44 UTC] {task_command.py:416} INFO - Running <TaskInstance: hw_7_weather_check_warm_or_cold.hw_7_print_cold scheduled__2024-04-23T02:51:20.311091+00:00 [running]> on host
[2024-04-24, 02:51:44 UTC] {taskinstance.py:1662} INFO - Exporting env vars: AIRFLOW_CTX_DAG_OWNER='airflow' AIRFLOW_CTX_DAG_ID='hw_7_weather_check_warm_or_cold' AIRFLOW_CTX_TASK_ID='hw_7_pr
[2024-04-24, 02:51:44 UTC] {subprocess.py:63} INFO - Tmp dir root location: /tmp
[2024-04-24, 02:51:44 UTC] {subprocess.py:75} INFO - Running command: ['/usr/bin/bash', '-c', 'echo "It is cold"']
[2024-04-24, 02:51:44 UTC] {subprocess.py:86} INFO - Output:
[2024-04-24, 02:51:44 UTC] {subprocess.py:93} INFO - It is cold
[2024-04-24, 02:51:44 UTC] {subprocess.py:97} INFO - Command exited with return code 0
[2024-04-24, 02:51:44 UTC] {taskinstance.py:1400} INFO - Marking task as SUCCESS. dag_id=hw_7_weather_check_warm_or_cold, task_id=hw_7_print_cold, execution_date=20240423T025***20, start_dat
[2024-04-24, 02:51:45 UTC] {local_task_job_runner.py:228} INFO - Task exited with return code 0
[2024-04-24, 02:51:45 UTC] {taskinstance.py:2778} INFO - 0 downstream tasks scheduled from follow-on schedule check
```