SnowPro Snowpark Specialist

Exam Practice Tests

by

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About this Book

Who this book is for

- People trying to pass the new **SnowPro Snowpark Specialist certification exam** issued recently by Snowflake.
- Snowflake experts trying to improve their programming skills by learning Snowpark.
- Python developers willing to acquire a certification in Snowflake AI Data Cloud programming.

This is not an introduction to Snowflake, as you should already have some rather advanced knowledge on this platform. Passing the **SnowPro Core certification exam** is also a requirement for this advanced specialty exam.

The live interactive version of this book has been implemented on Udemy with the **SnowPro Snowpark Specialist - Exam Practice Tests** title. The video version of these practice exams is in a separate course on Udemy with the **SnowPro Specialty: Snowpark Certification Exam** title:

My name is Cristian Scutaru and I'm a world-class expert in Snowflake, SnowPro SME (Subject Matter Expert) and former Snowflake Data Superhero. For several years, I helped Snowflake create many of the exam questions out there. Many of the Advanced exam questions and answers from the SnowPro exams have been indeed created by me.

I passed over the years 5 out of the 6 SnowPro exams myself, all from the first attempt. In the last 3-4 years alone, I passed over 40 paid proctored certification exams overall. And I still never failed one, I have been lucky so far.

This book contains two high-quality practice tests of 50 questions each, to help you become certified as a SnowPro Snowpark Specialist, passing the new online proctored certification exam.

- All questions are closely emulated from those currently found in the actual exam, so you'll not waste time on anything else.
- All questions are curated and very similar to the actual exam questions, which are long and scenario-based for the most part.
- Most exam questions include long portions of code, as this certification is targeted in particular for Python developers.
- Unlike the real exam, you'll know right away what questions you missed, and what the correct answers are.
- Detailed explanations with external references for any possible choice, in each practice test question.
- Quiz question types are mostly multi-choice and multi-select.

Specifics of the real exam

- Announced on Oct 21, 2024
- **Between 65 and 80 questions (80 for the beta exam)**
- **Less than 2 hours time limit (115 minutes for the beta exam)**
- **Passing score of around 75% (must be estimated later on)**
- $112 US fee per attempt for the beta exam (until Dec 20, 2024)
- or $225 US fee per attempt when going live (since Jan 2025)

What the exam will test you for

- Specialized knowledge, skills, and best practices used to build Snowpark DataFrame data solutions in Snowflake including key concepts, features, and programming constructs.
- Perform data transformations using Snowpark DataFrame functions.
- Query data sources as Snowpark DataFrame objects.
- Connect to Snowflake using a Snowpark Session object.
- Process results client-side or persist results in Snowflake through Snowpark DataFrame actions.
- Design a sequence of operations or conditional logic with Snowpark stored procedures.

What the typical candidate may have

- 1+ years of Snowpark experience with Snowflake, in an enterprise environment.
- Knowledge of the Snowpark API for Python and Snowpark's client-side and server-side capabilities, as well as experience with data migration.
- Advanced proficiency writing code in Python and/or PySpark.

Exam domain breakdown (download and check the Study Guide)

- **Snowpark Concepts - 15%**
- **Snowpark API for Python - 30%**
- **Snowpark for Data Transformations - 35%**
- **Snowpark Performance Optimization - 20%**

How you should use these tests

- Try the first practice test. And do not worry about the time limit or if you fail. You are expected to fail, this is how you learn...
- Stop the exam anytime, if you're not patient enough to go over all the questions.
- The passing score is estimated at this time to be around 75%. Once you are done, go to the ***Answers and Explanations*** section for your test, and check both the right and wrong choices for each individual question (remember these!).
- Read the detailed **Explanation** for each question.
- Repeat with the second practice test. Don't skip it, as both these tests together cover most types of actual exam questions.
- Repeat these tests again and again, until you score consistently at least 90% on each. And then go for the real deal. *Good luck!*

Practice Test 1

Question 1:

An active WH1 Snowflake warehouse has been created with the default parameter values. Which of the following statements will fail? (choose one)

A) `ALTER WAREHOUSE wh1 SET WAREHOUSE_SIZE = xsmall;`

B) `ALTER WAREHOUSE wh1 SET WAREHOUSE_TYPE = 'snowpark-optimized';`

C) `ALTER WAREHOUSE wh1 SET SCALING_POLICY = economy;`

D) `ALTER WAREHOUSE wh1 SET AUTO_SUSPEND = 0;`

Question 2:

Which of the following statements will create a Medium Snowpark-optimized warehouse? (choose one)

A) `CREATE MEDIUM SNOWPARK OPTIMIZED WAREHOUSE wh1;`

B) `CREATE WAREHOUSE wh1 MEDIUM SNOWPARK OPTIMIZED;`

C) `CREATE WAREHOSUE wh1 TYPE = 'SNOWPARK OPTIMIZED' SIZE = MEDIUM;`

D) `CREATE WAREHOUSE wh1 WAREHOUSE_TYPE = 'SNOWPARK-OPTIMIZED';`

Question 3:

What should you do to change an active Snowpark-optimized warehouse to an X-Small standard warehouse? (choose three)

A) Change its size to 'X-SMALL'.

B) Resume the warehouse.

C) Suspend the warehouse.

D) Change its size to Snowpark-optimized.

E) Change its type to Snowpark-optimized.

Question 4:

A virtual warehouse was just created with `CREATE WAREHOUSE wh1`. Which of the following will successfully change its type? (choose one)

A)

```
ALTER WAREHOUSE wh1 SET AUTO_SUSPEND = 0;
ALTER WAREHOUSE wh1 SET WAREHOUSE_SIZE = 'MEDIUM';
ALTER WAREHOUSE wh1 SET WAREHOUSE_TYPE = 'SNOWPARK-OPTIMIZED';
```

B)

```
ALTER WAREHOUSE wh1 SUSPEND;
ALTER WAREHOUSE wh1 SET WAREHOUSE_SIZE = 'MEDIUM';
ALTER WAREHOUSE wh1 SET WAREHOUSE_TYPE = 'SNOWPARK-OPTIMIZED';
```

C)

```
ALTER WAREHOUSE wh1 SUSPEND;
ALTER WAREHOUSE wh1 SET WAREHOUSE_TYPE = 'SNOWPARK-OPTIMIZED';
```

D)

```
ALTER WAREHOUSE wh1 SET WAREHOUSE_TYPE = 'SNOWPARK-OPTIMIZED';
```

Question 5:

When should you use a Snowflake-optimized warehouse? (choose two)

A) When training a machine learning model on big data.

B) When serving a machine learning model to multiple users.

C) For workloads with large memory requirements or dependencies on a specific CPU architecture.

D) To optimize complex SQL query performance.

E) To cut costs when compared to using standard virtual warehouses with the same size.

Question 6:

Which parameter allows you to modify the memory resources and CPU architecture for a Snowpark-optimized warehouse? (choose one)

A) WAREHOUSE_TYPE

B) WAREHOUSE_SIZE

C) RESOURCE_CONSTRAINT

D) RESOURCE_MONITOR

Question 7:

How can you create a Snowpark session in your Python application? (choose three)

A) Call the `create` method of the SessionBuilder, to establish the session.

B) Call the `connect` method of the Snowflake Connector for Python.

C) Call the `get_active_session` method with custom connection parameters.

D) Create a Python dictionary containing the names and values of the parameters for connecting to Snowflake.

E) Pass a dictionary to the `Session.builder.configs` method, to return a builder object that has these connection parameters.

Question 8:

Which of the following is a required Snowpark session parameter, when connecting with a key pair? (choose one)

A) token

B) private_key

C) public_key

D) password

E) key_pair

Question 9:

You try to establish a connection using the Snowflake Connector for Python and key-pair authentication. Which of the following are required connection parameters? (choose two)

A) host

B) password

C) private_key_file_pwd

D) role

E) private_key_file

Question 10:

You pass a Python dictionary of connection parameters to `Session.builder.config(params).create()`. However, the call failed. What was the problem? (choose one)

A) You passed some invalid parameters.

B) Should call the `app_name` function of the SessionBuilder instead.

C) Should call the `getOrCreate` method instead.

D) Should call the `configs` method instead.

Question 11:

Which of the following parameters are optional, when you connect to Snowflake with a Snowpark session? (choose three)

A) account

B) password

C) role

D) warehouse

E) user

F) database

Question 12:

Which is a type of parameter you can pass to the `Session.builder.config` function? (choose one)

A) The path to a `connections.toml` file.

B) The name of a section from the `connections.toml` file.

C) Individual key and value pairs from the `connections.toml` file.

D) The name of the stage where the `connections.toml` file was loaded.

Question 13:

How can you install Snowpark Python? (choose two)

A) Add a com.snowflake dependency to the `pom.xml` file of your Maven project.

B) `pip install snowflake-connector-python`

C) `pip install snowflake-snowpark-python`

D) `conda install snowflake-snowpark-python`

E) `conda install snowflake-connector-python`

Question 14:

Which of the following will install the "pandas on Snowflake" API? (choose one)

A) `pip install "snowflake-snowpark-python[pandas]"`

B) `pip install "snowflake-snowpark-python[modin]"`

C) `pip install snowflake-snowpark-python`

D) `pip install snowflake-connector-python`

Question 15:

What is returned by the following query, that you can execute in a SQL worksheet in the Snowflake web UI? (choose one)

```
select distinct $4
from snowflake.information_schema.packages
where $3 = 'python';
```

A) The path for all Python runtimes deployed in a Snowflake warehouse.

B) All versions of the Python runtimes for the supported Snowpark packages.

C) All versions of the supported Snowpark packages.

D) All versions for your deployed Snowpark applications.

Question 16:

You call `DESC PROCEDURE` on a stored procedure that you previously created and registered with Snowpark Python. Which of the following is a possible information returned for PACKAGES? (choose one)

A) `['cloudpickle==2.2.1']`

B) `['pandas']`

C) `['snowflake-snowpark-python','cloudpickle==2.2.1']`

D) `['snowflake-snowpark-python']`

Question 17:

What happens when you deploy a stored proc through Snowpark Python using a supported Anaconda package but with an unspecified version? (choose two)

A) The stored proc will fail to be registered, as the version is required.

B) If you have a more recent version installed locally in your test environment, that version will be deployed.

C) When a more recent version becomes available, Snowflake may automatically use that version for your package.

D) Snowflake will automatically select the oldest version of that supported package.

E) Snowflake will automatically select the latest version of that supported package.

Question 18:

You register and execute a stored proc with Snowpark Python from a local environment. You have a more recent version of one of your packages than any other version deployed for that supported package. What will happen at runtime? (choose one)

A) The stored proc will fail to be executed.

B) You get a warning for the version mismatch, but the execution will go ahead.

C) Your specific version will be automatically deployed on the Snowflake warehouse.

D) A message will be automatically sent to the Snowflake customer support, to include your package version in their list of supported Anaconda packages.

Question 19:

You installed Snowpark Python in your local virtual environment a while ago, with *pip*. A new version became available. How do you install it? (choose one)

A) You run again `pip install snowflake-snowpark-python` from the command line.

B) You run `pip install snowflake-snowpark-python --upgrade`.

C) You run `pip upgrade snowflake-snowpark-python`.

D) You run `pip update snowflake-snowpark-python`.

Question 20:

You registered a stored procedure with a supported Python package, but without specifying a version. How can you quickly check which version has been deployed, for that package and its eventual dependencies? (choose one)

A) Call DESC PROCEDURE and look at the PACKAGES row.

B) Call DESC PROCEDURE and look at INSTALLED_PACKAGES row.

C) Call SHOW PROCEDURES.

D) Query the INFORMATION_SCHEMA.PACKAGES view.