```
>>> from pyspark.sql import SparkSession
>>> from pyspark.sql import functions as F
>>> spark = SparkSession \
...     .builder \
...     .appName("RateSourceApp") \
...     .getOrCreate()
>>> rate_df = spark \
...     .readStream \
...     .format("rate") \
...     .option("rowsPerSecond", 10) \
...     .load()
>>> rate_df.printSchema()
root
 |-- timestamp: timestamp (nullable = true)
 |-- value: long (nullable = true)

>>> rate_df.isStreaming
True
```

```
>>> rate_stream = rate_df \
...     .writeStream \
...     .format("console") \
...     .start()
>>> -------------------------------------------
Batch: 0
-------------------------------------------
+---------+-----+
|timestamp|value|
+---------+-----+
+---------+-----+


-------------------------------------------
Batch: 1
-------------------------------------------
+--------------------+-----+
|           timestamp|value|
+--------------------+-----+
|2021-09-13 19:58:...|    0|
|2021-09-13 19:58:...|    1|
|2021-09-13 19:58:...|    2|
|2021-09-13 19:58:...|    3|
|2021-09-13 19:58:...|    4|
|2021-09-13 19:58:...|    5|
|2021-09-13 19:58:...|    6|
|2021-09-13 19:58:...|    7|
|2021-09-13 19:58:...|    8|
|2021-09-13 19:58:...|    9|
+--------------------+-----+


-------------------------------------------
Batch: 2
-------------------------------------------
+--------------------+-----+
|           timestamp|value|
+--------------------+-----+
|2021-09-13 19:58:...|   10|
|2021-09-13 19:58:...|   11|
|2021-09-13 19:58:...|   12|
|2021-09-13 19:58:...|   13|
|2021-09-13 19:58:...|   14|
|2021-09-13 19:58:...|   15|
```

```
[student910_14@bigdataanalytics2-head-shdpt-v31-1-0 process_csv_as_stream]$ echo 1 >> 1.csv
[student910_14@bigdataanalytics2-head-shdpt-v31-1-0 process_csv_as_stream]$ ls
1.csv
[student910_14@bigdataanalytics2-head-shdpt-v31-1-0 process_csv_as_stream]$ cat 1.csv
1
[student910_14@bigdataanalytics2-head-shdpt-v31-1-0 process_csv_as_stream]$ echo 2 message >> 2.csv
[student910_14@bigdataanalytics2-head-shdpt-v31-1-0 process_csv_as_stream]$
```

```
>>> file_stream = file_df \
...     .writeStream \
...     .format("console") \
...     .trigger(processingTime="10 Seconds") \
...     .start()
>>> file_stream.isActive()
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
TypeError: 'bool' object is not callable
>>> file_stream.isActive
True
>>> file_stream.explain()
No physical plan. Waiting for data.
>>>
```