



## Full Stack Developer - RCG

Thank you for showing interest in the Full Stack Developer position at Royal Caribbean. We prepared a python programming assessment to evaluate your coding and research skills. You have 72 hours to complete it, you can send us the final project or upload it to GitHub.

### Project Overview:

1. Create a python script to query the TimezoneDB API and populate the tables TZDB\_TIMEZONES and TZDB\_ZONE\_DETAILS
2. Your script should handle errors when retrieving the API and log them into the table TZDB\_ERROR\_LOG.
3. TZDB\_TIMEZONES is to be deleted every time you script runs and populated with data from the API.
4. TZDB\_ZONE\_DETAILS is to be populated incrementally, not adding rows if the data in the table already exists.

Hint: To achieve number 4 you can create a stage table before writing into TZDB\_ZONE\_DETAILS.

### Notes:

- To get access to the API provided by TimezoneDB go to: <https://timezonedb.com> and create an account (free), you will be provided with a Key that you can use in your scripts.
- You can use your preferred database to upload the data.

There are a few endpoints to use:

- Get List: Use this one to populate the TZDB\_TIMEZONES table.
- Get Time Zone: Use this one to populate TZDB\_ZONE\_DETAILS

### TZDB\_TIMEZONES TABLE:

Column Name	PK	Null?	Data Type
COUNTRYCODE		N	VARCHAR2 (2 Byte)
COUNTRYNAME		N	VARCHAR2 (100 Byte)
ZONENAME	1	N	VARCHAR2 (100 Byte)
GMTOFFSET		Y	NUMBER
IMPORT_DATE		Y	DATE

PRIMARY KEY: ZONENAME

### SAMPLE:

COUNTRYCODE	COUNTRYNAME	ZONENAME	GMTOFFSET	IMPORT_DATE
CI	Ivory Coast	Africa/Abidjan	0	1/27/2023 1:08:00 PM
GH	Ghana	Africa/Accra	0	1/27/2023 1:08:00 PM
ET	Ethiopia	Africa/Addis_Ababa	10800	1/27/2023 1:08:00 PM
DZ	Algeria	Africa/Algiers	3600	1/27/2023 1:08:00 PM
ER	Eritrea	Africa/Asmara	10800	1/27/2023 1:08:00 PM



#### TZDB\_ZONE\_DETAILS

Column Name	PK	Null?	Data Type
COUNTRYCODE		N	VARCHAR2 (2 Byte)
COUNTRYNAME		N	VARCHAR2 (100 Byte)
ZONENAME	1	N	VARCHAR2 (100 Byte)
GMTOFFSET		N	NUMBER
DST		N	NUMBER
ZONESTART	2	N	NUMBER
ZONEEND	3	N	NUMBER
IMPORT_DATE		Y	DATE

PRIMARY KEY: ZONENAME, ZONESTART, ZONEEND

SAMPLE:

COUNTRYCODE	COUNTRYNAME	ZONENAME	GMTOFFSET	DST	ZONESTART	ZONEEND	IMPORT_DATE
PT	Portugal	Atlantic/Azores	-3600	0	1667091600	1679792400	1/27/2023 1:26:53 PM

#### TZDB\_ERROR\_LOG

Column Name	PK	Null?	Data Type
ERROR_DATE		N	DATE
ERROR_MESSAGE		N	VARCHAR2 (1000 Byte)