**Author**: Pranay Chowdary Veluri

**Date** : 25-04-2022

**Description**: This is a code challenge for prospective Test Automation Engineer to work for Global Logic.

**Task Description**:

Given function (Python):

def output(num):

if num > 100 or num < -100 or num == 13:

raise Exception("System error")

print(10/num)

**Tests to be covered:**

1)Create a Test Framework using Python and Robot Framework.

2)Create as many tests as possible to show different test design techniques.

Bonus tasks:

3)Provide test documentation.

**System and Software Info:**

* Operating System - Windows
* Python installed (Version : 3.10)
* Robot Framework Installed (Version : 4.0.1)

**Solution Implementation:**

The Test Automation script development is handled in Robot Framework Automation based on Python Language

This Script Approach includes Keyword Driven Development

Execution is done via Command prompt in Robot Framework

Details on Test Folders & Files as follows:

* **Resources** – This File contains all the necessary resources and Details
  + **Variable.robot** - This File Contains all the Variables for providing input required for the test framework
* **Tests**  – This Folder has the test step file with required test cases
* **TestCases.robot** - This File contains all the steps required for the validation of the python function

**How to Execute:**

1. Install Python from Python.org with path added to system environment variable
2. Install the below robot framework libraries
   1. Robotframework

How to Install:

* Open Cmd in admin mode
* Use command – “pip install <<libraryname>>”
* Eg., pip install robotframework

1. Save the test scripts folder “Global Logic to Local”
2. Open cmd and Navigate to Global Logic Folder
3. Type “robot ./Tests/TestCases.robot” and press Enter

**Test Result Validation:**

1. Final test results can be seen in the Log.html, report.html and Output.xml file
2. Overall test results with all the statistics of the whole executions can be seen in report.html
3. Individual step level test results can be seen in log file

**Solution Proposals**:

1. Inputs for the particular test cases can we even passed through two more ways

* Argument file
* Inline command while executing the robot file

1. Execution can be done by one robust Driver script written in Robot to execute multiple test suites in sequential order(Gui testing, API testing via postman/newman)