**TP Couverture Structurelle**

**A renvoyer au format .pdf à cette adresse :**

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**Avec « [TP INSA CS] » comme intitulé**

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# Python Testing Example: unittest

This is the example project for [Python Testing 101: doctest](https://automationpanda.com/2017/03/06/python-testing-101-doctest/), part of the [Python Testing 101 series](https://automationpanda.com/2017/03/06/python-testing-101-introduction/) from [Automation Panda](https://automationpanda.com/). It will work for Python 2 and 3.

## Project Structure

This project has two packages:

* com.automationpanda.example contains calc.py, which has a basic Calculator class.
* com.automationpanda.tests contains test\_calc.py, which contains unittest test cases.

## TP N°2 Code Coverage

If not already done, Download or Clone this repo : git clone <https://github.com/Vincent-Louis-DGA/CalcCodeCoverage/>

## Running Tests

To run tests, run the following commands from the example project root directory after having downloaded CalcCodeCoverage source code:

* pytest
* coverage run -m pytest
* python -m coverage xml

## Running SonarScanner

To run sonarscanner, download it <https://binaries.sonarsource.com/Distribution/sonar-scanner-cli/sonar-scanner-cli-4.6.2.2472.zip>, unzip the file and then execute the following command (in a terminal drag and drop sonar-scanner script) at the root of the repository, let's say on sonar-project.properties

* /Users/path/to/sonar-scanner-yourVersion-yourOS/bin/sonar-scanner

## Results analysis

Provide a synthesis of code coverage

Is it sufficient to achieve for a software developed according to DAL B?

Why the coverage of com/automationpanda/example/calc.py is not fully achieved?

Could you provide a solution to reach 100% of line coverage?

Which is the minimal number of test cases needed to reach MC/DC criteria for the following code structure ? Justify.

*IF ( Condition\_A && Condition\_B && Condition\_C) {*

*THEN*

*Dosomething() ;*

*}*

* 1
* 3
* 4
* 8