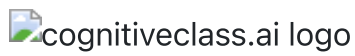


# Hands-on Lab: Static Code Analysis



## Static Code Analysis Lab

Estimated time needed: **30** minutes

## Objectives

After completing this lab you will be able to:

- Install pylint package
- Run Static Code Analysis on a python program
- Check the compliance score of a python program.
- Fix common mistakes and improve the compliance score.

## Install the pylint package

- Open a new terminal
- At the terminal, run the below command.
- pip3 install pylint
- This should install the pylint package.

## Create a sample python file for static code analysis

Create a new file named **sample1.py**

Copy and paste the below code into **sample1.py**

```
def add(number1, number2):  
    return number1 + number2  
  
num1 = 4  
num2 = 5  
total = add(num1, num2)  
print("The sum of {} and {} is {}".format(num1, num2, total))
```

Save the file **sample1.py**

## Run pylint

- Open a terminal
- run the below command
- pylint sample1.py
- Pylint goes through every line of code and gives you a list all the non-compliant lines.
- Pylint gives you a compliance score (10 being maximum).

## Correct the mistakes identified by pylint.

- Based on the report given by pylint changes were made to this code to address the following issues.
  - Exactly one space required after comma
  - Exactly one space required around assignment
- Create a new file named **sample2.py**
- Copy and paste the below code into **sample2.py**

```
def add(number1, number2):
    return number1 + number2

NUM1 = 4
num2 = 5
total = add(NUM1, num2)
print("The sum of {} and {} is {}".format(NUM1, num2, total))
```

Save the file **sample2.py**

## Run pylint

- Open a terminal
- run the below command
- pylint sample2.py
- This will give you the compliance score.
- This time you should see the score improve.

## Your task

Improve the score in sample2.py to a perfect 10 by correcting all the issues pointed out by pylint. If cant figure out how to solve some issues it is helpful to google the pylint message.

## Congratulations!

You now know how to perform static code analysis.

## Authors

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## Other Contributors

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## Change Log

Date (YYYY-MM-DD)	Version	Changed By	Change Description
2020-01-29	1.1	Rav Ahuja	Formatting & license changes
2020-11-25	1.0	Ramesh Sannareddy	Created initial version of the lab

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