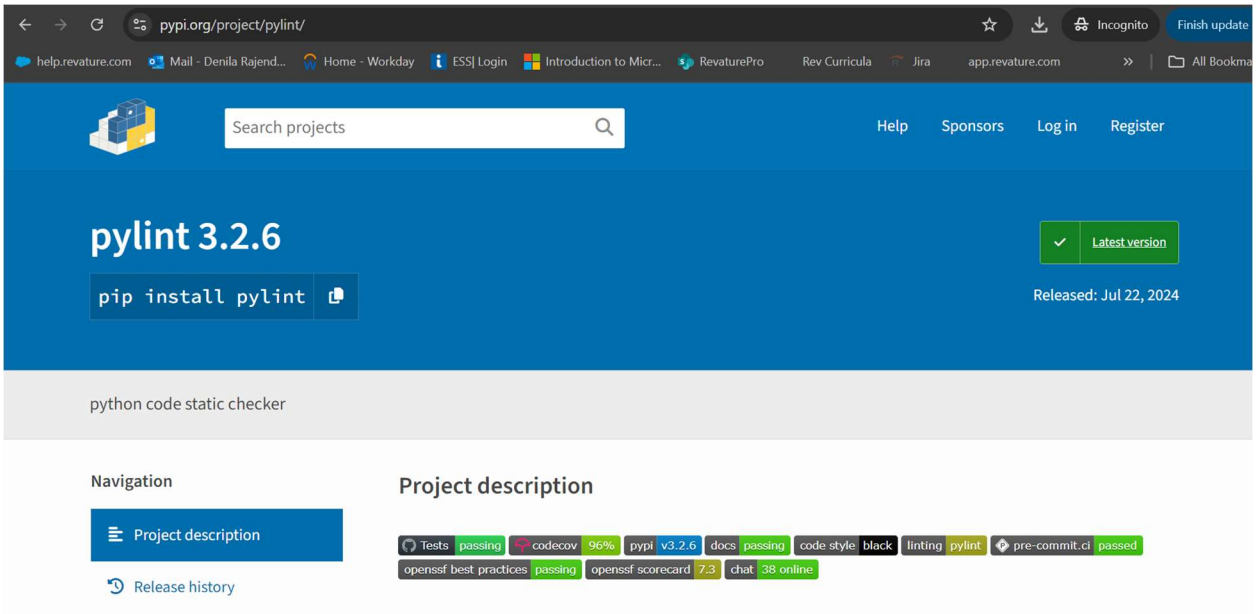
Pylint & Connect SQL

Pylint:

https://pypi.org/project/pylint/



Pylint is an open-source tool designed to help developers check code and its quality, detect programming errors in the Python language and offer simple refactoring suggestions. It has been named according to the common Python convention with the prefix “py”.

pylint --version

Consider the following program that accepts two numbers and prints their sum.

- Python3

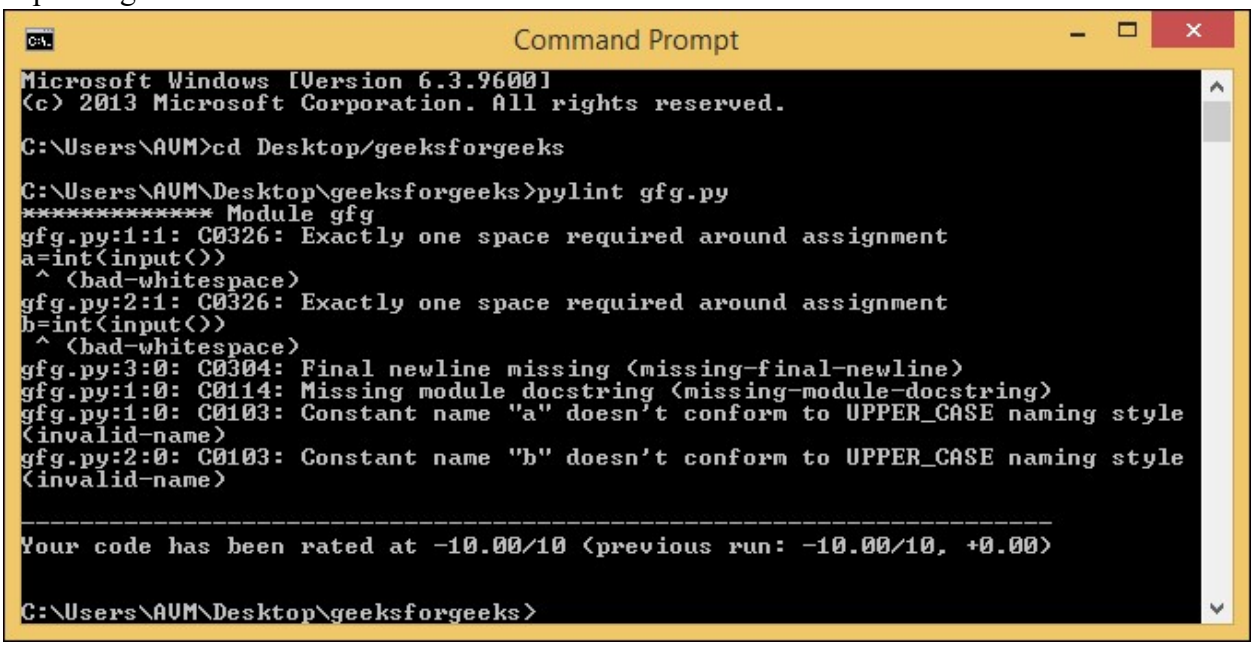
```
a = 1

b = 2

print(a + b)
```

Now save the above program in the file **gfg.py**
Open your command prompt / terminal and type the following command

pylint gfg.py

Pylint & Connect SQL

In the pylint 2.4.4 version, you will get a report as shown below. Messages might change depending on the version.



Score for the code given above is -10.0/10.0(Very low). If we get a low score it doesn't mean that our code is wrong. The score represents how good/bad your code is understandable by another programmer

o	Message Object	Expansion	Explanation
1.	C	Convention	It is displayed when the program is not following the standard rules.
2.	R	Refactor	It is displayed for bad code smell
3.	W	Warning	It is displayed for python specific problems
4.	E	Error	It is displayed when that particular line execution results some error
5.	F	Fatal	It is displayed when pylint has no access to further process that line.

Pylint & Connect SQL

Let’s discuss some techniques to improve score.

- ID **C0326** suggest a bad-white space error means we need to give a whitespace between **a** and = symbol. This rule is applicable to all declarations where an operator is used immediately after an identifier.
- ID **C0304** comes under missing-new-line suggestion which means we have to add a blank line when we complete our code.
- ID **C0114** comes under missing-module-docstring suggestion which means we need to add a docstring at the top which refers to the use of the program written below that.
- ID **C0103** comes under invalid-name suggestion which can be avoided by writing the identifiers start with a capital letter. But, we usually believe that class names use CamelCasing i.e class names start with an upper-case letter. To avoid this suggestion we will add a regular expression to pylint that actually accepts all the variables in the lowercase letters. We will discuss this more in the further examples.

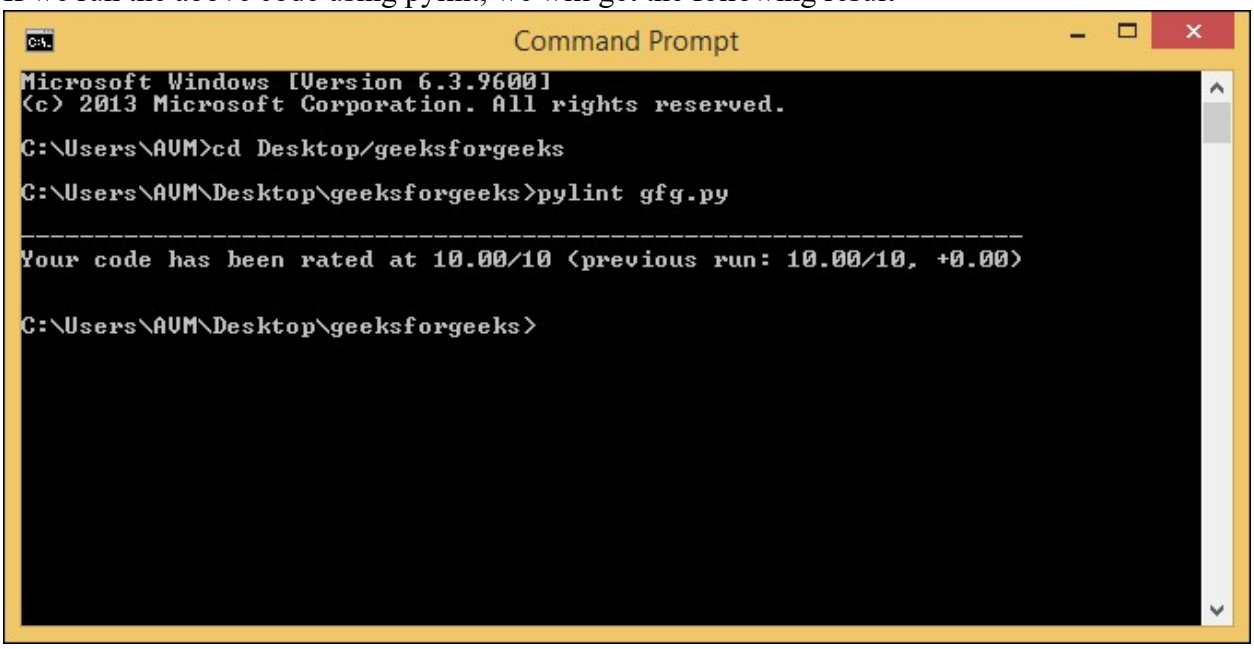
The modified version of the code is:

- Python3

```
'''
This program adds two numbers and displays their results
'''
A = 1
B = 2
print('Sum of Numbers:', A + B)
```

Pylint & Connect SQL

If we run the above code using pylint, we will get the following result



Here we improved our score from -10.0 to 10.0. That's great

Connect SQL:

https://www.geeksforgeeks.org/how-to-connect-python-with-sql-database/

Thank you