



# Tecnológico de Monterrey

Instituto Tecnológico y de Estudios Superiores de Monterrey

Escuela de Ingeniería y Ciencias  
Maestría en Inteligencia Artificial Aplicada

Actividad 6.2 Ejercicio de programación 3 y pruebas de unidad

*Pruebas de software y aseguramiento de la calidad*

Kevin Gutiérrez Pérez A01795692

16 de febrero del 2025

## Actividad 6.2 Ejercicio de programación 3

Evidencia de ejecución de código con resultados esperados:

```
Kevin@MacBook-Pro-de-Kevin Actividad 6.2 > Python3 A01795692_6_2.py
Ingrese el nombre del archivo que contiene los clientes: customers.json
Ingrese el nombre del archivo que contiene las reservaciones: reservations.json
Se cargaron 2 hoteles, 2 clientes y 2 reservas.
...
Ran 3 tests in 0.000s
OK
```

Evidencia de ejecución de código con flake8:

```
Kevin@MacBook-Pro-de-Kevin Actividad 6.2 % flake8 A01795692_6_2.py
A01795692_6_2.py:7:80: E501 line too long (86 > 79 characters)
A01795692_6_2.py:20:80: E501 line too long (86 > 79 characters)
A01795692_6_2.py:21:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:25:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:29:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:32:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:40:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:41:1: W503 blank line contains whitespace
A01795692_6_2.py:54:1: W503 blank line contains whitespace
A01795692_6_2.py:63:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:64:80: E501 line too long (85 > 79 characters)
A01795692_6_2.py:65:80: E501 line too long (85 > 79 characters)
A01795692_6_2.py:67:80: E501 line too long (97 > 79 characters)
A01795692_6_2.py:74:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:75:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:81:1: W503 blank line contains whitespace
A01795692_6_2.py:91:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:92:80: E501 line too long (83 > 79 characters)
A01795692_6_2.py:95:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:106:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:110:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:118:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:123:1: E502 expected 2 blank lines, found 1
A01795692_6_2.py:129:80: E501 line too long (83 > 79 characters)
A01795692_6_2.py:130:80: E501 line too long (87 > 79 characters)
A01795692_6_2.py:132:1: W503 blank line contains whitespace
A01795692_6_2.py:136:1: W503 blank line contains whitespace
A01795692_6_2.py:137:80: E501 line too long (106 > 79 characters)
A01795692_6_2.py:140:80: E501 line too long (106 > 79 characters)
A01795692_6_2.py:139:1: E502 expected 2 blank lines after class or function definition, found 1
```

Errores mostrados y corregidos:

Kevin@MacBook-Pro-de-Kevin Actividad 6\_2 % flake8 A01795692\_6\_2.py

A01795692\_6\_2.py:6:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:7:80: E501 line too long (86 > 79 characters)  
A01795692\_6\_2.py:12:1: W293 blank line contains whitespace  
A01795692\_6\_2.py:21:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:25:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:25:80: E501 line too long (88 > 79 characters)  
A01795692\_6\_2.py:32:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:40:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:48:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:54:1: W293 blank line contains whitespace  
A01795692\_6\_2.py:63:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:64:80: E501 line too long (85 > 79 characters)  
A01795692\_6\_2.py:67:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:67:80: E501 line too long (97 > 79 characters)  
A01795692\_6\_2.py:74:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:75:80: E501 line too long (108 > 79 characters)  
A01795692\_6\_2.py:81:1: W293 blank line contains whitespace  
A01795692\_6\_2.py:91:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:91:80: E501 line too long (92 > 79 characters)  
A01795692\_6\_2.py:92:80: E501 line too long (103 > 79 characters)  
A01795692\_6\_2.py:95:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:106:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:113:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:118:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:123:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:128:1: E302 expected 2 blank lines, found 1  
A01795692\_6\_2.py:129:80: E501 line too long (83 > 79 characters)  
A01795692\_6\_2.py:130:80: E501 line too long (87 > 79 characters)  
A01795692\_6\_2.py:131:80: E501 line too long (95 > 79 characters)  
A01795692\_6\_2.py:132:1: W293 blank line contains whitespace  
A01795692\_6\_2.py:136:1: W293 blank line contains whitespace  
A01795692\_6\_2.py:137:80: E501 line too long (106 > 79 characters)  
A01795692\_6\_2.py:138:1: W293 blank line contains whitespace  
A01795692\_6\_2.py:139:1: E305 expected 2 blank lines after class or function definition,  
found 1

Evidencia de errores corregidos:

A screenshot of the PyCharm IDE interface. The top menu bar includes Code, File, Edit, Selection, View, Go, Run, Terminal, Window, and Help. The title bar shows the current file is 'computeSales.py' and the tab bar also lists 'A01795692\_6\_2.py'. Below the menu is a search bar and a toolbar with various icons. The main area is the code editor containing Python code for managing hotels. The terminal below the editor shows several error messages from flake8:

```
Kevin@MacBook-Pro-de-Kevin Actividad 6.2 % flake8 A01795692_6_2.py
A01795692_6_2.py:109:08: E501 line too long (183 > 79 characters)
Kevin@MacBook-Pro-de-Kevin Actividad 6.2 % flake8 A01795692_6_2.py
Kevin@MacBook-Pro-de-Kevin Actividad 6.2 % flake8 A01795692_6_2.py
```

Evidencia de funcionamiento de código una vez corregidos los errores:

A screenshot of the PyCharm IDE interface, similar to the previous one but with corrected code. The terminal now shows successful test results from pytest:

```
Ingrese el nombre del archivo que contiene los hoteles: hotels.json
Ingrese el nombre del archivo que contiene los clientes: customers.json
Ingrese el nombre del archivo que contiene las reservaciones: reservations.json
Se cargaron 2 hoteles, 2 clientes y 2 reservas.
...
Ran 3 tests in 0.000s
OK
```

Evidencia de ejecución de pylint

```

1 """
2 Código para la adquisición de datos de hotel y reservaciones
3 """
4 import json
5 import os
6 import unittest
7 from typing import List, Dict
8
9
10 class Hotel:
11     def __init__(self, hotel_id: int, name: str, location: str,
12                  rooms_available: int):
13         self.hotel_id = hotel_id
14         self.name = name
15         self.rooms_available = rooms_available

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

0 Kevin@MacBook-Pro-de-Kevin:~/Desktop/Maestria Inteligencia Artificial/Pruebas de software y aseguramiento de la calidad/Actividad 6\_2 > A01795692\_6\_2.py > ...

\*\*\*\*\* Module A01795692\_6\_2 \*\*\*\*\*

A01795692\_6\_2.py:1:0: C0114: Missing module docstring (missing-module-docstring)  
 A01795692\_6\_2.py:1:0: C0103: Module name "A01795692\_6\_2" doesn't conform to snake\_case naming style (invalid-name)  
 A01795692\_6\_2.py:15:4: C0115: Missing class docstring (missing-class-docstring)  
 A01795692\_6\_2.py:29:0: C0116: Missing function or method docstring (missing-function-docstring)  
 A01795692\_6\_2.py:24:0: C0116: Missing function or method docstring (missing-function-docstring)  
 A01795692\_6\_2.py:29:0: C0116: Missing function or method docstring (missing-function-docstring)  
 A01795692\_6\_2.py:24:0: C0116: Missing function or method docstring (missing-function-docstring)  
 A01795692\_6\_2.py:47:0: C0115: Missing class docstring (missing-class-docstring)  
 A01795692\_6\_2.py:56:0: C0115: Missing class docstring (missing-class-docstring)

Your code has been rated at 6.99/10

Errores mostrados y corregidos:

### \*\*\*\*\* Module A01795692\_6\_2

A01795692\_6\_2.py:1:0: C0114: Missing module docstring (missing-module-docstring)

A01795692\_6\_2.py:1:0: C0103: Module name "A01795692\_6\_2" doesn't conform to snake\_case naming style (invalid-name)

A01795692\_6\_2.py:7:0: C0115: Missing class docstring (missing-class-docstring)

A01795692\_6\_2.py:15:4: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:7:0: R0903: Too few public methods (1/2) (too-few-public-methods)

A01795692\_6\_2.py:24:0: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:29:0: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:38:0: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:47:0: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:56:0: C0115: Missing class docstring (missing-class-docstring)

A01795692\_6\_2.py:63:4: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:56:0: R0903: Too few public methods (1/2) (too-few-public-methods)

A01795692\_6\_2.py:72:0: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:79:0: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:88:0: C0115: Missing class docstring (missing-class-docstring)

A01795692\_6\_2.py:89:4: R0913: Too many arguments (6/5) (too-many-arguments)

A01795692\_6\_2.py:89:4: R0917: Too many positional arguments (6/5) (too-many-positional-arguments)

A01795692\_6\_2.py:97:4: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:88:0: R0903: Too few public methods (1/2) (too-few-public-methods)

A01795692\_6\_2.py:107:0: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:114:0: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:119:13: W1514: Using open without explicitly specifying an encoding (unspecified-encoding)

A01795692\_6\_2.py:126:0: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:128:13: W1514: Using open without explicitly specifying an encoding (unspecified-encoding)

A01795692\_6\_2.py:134:0: C0115: Missing class docstring (missing-class-docstring)

A01795692\_6\_2.py:135:4: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:140:0: C0115: Missing class docstring (missing-class-docstring)

A01795692\_6\_2.py:141:4: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:147:0: C0115: Missing class docstring (missing-class-docstring)

A01795692\_6\_2.py:148:4: C0116: Missing function or method docstring (missing-function-docstring)

A01795692\_6\_2.py:153:0: C0116: Missing function or method docstring (missing-function-docstring)

---

Your code has been rated at 6.99/10

Evidencia de código corregido en base a comentarios de pylint:

The screenshot shows a Mac OS X desktop environment with a terminal window open. The terminal window title is "Dom 16 de feb 11:35p.m.". The command entered is "pylint a01795692\_6\_2.py". The output of the command is displayed in the terminal window, showing the following results:

```
Kevin@MacBook-Pro-de-Kevin Actividad 6_2 % pylint a01795692_6_2.py
Your code has been rated at 10.00/10 (previous run: 9.92/10, +0.08)
a01795692_6_2.py:148:4: C0116: Missing function or method docstring (missing-function-docstring)
a01795692_6_2.py:153:0: C0116: Missing function or method docstring (missing-function-docstring)

Ran 3 tests in 0.000s
OK
```