



Tecnológico  
de Monterrey

Instituto Tecnológico y de Estudios  
Superiores de Monterrey

**Tarea:6.2 Ejercicio de programación 3 y pruebas de unidad**

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Pruebas de software y aseguramiento de la calidad

22 de febrero del 2026

## Anexo de pantallas de validación:

python -m unittest discover -s tests

```
test_reservation.py test_hotel.py test_customer.py storage.py services.py models.py
                    ▾ TestCustomerService
1  # -*- coding: utf-8 -*-
2  #!/usr/bin/env python
3
4  import unittest
5  from services import CustomerService
6  from models import Customer
7
8
9  class TestCustomerService(unittest.TestCase):
10     def setUp(self):
11         self.service = CustomerService()
12         self.service.storage.save([])
100 % 0 2 ↑ ↓  Ln: 2 Ch: 3
Developer PowerShell ...
+ Developer PowerShell
PS C:\Users\ConsueloRuiz\source\repos\A01795993_A6.2\hotel_system> python -m unittest discover -s tests
.....
Ran 9 tests in 0.010s
OK
PS C:\Users\ConsueloRuiz\source\repos\A01795993_A6.2\hotel_system>
```

coverage report -m

```
test_reservation.py test_hotel.py test_customer.py storage.py services.py models.py
                    ▾ TestCustomerService
1  # -*- coding: utf-8 -*-
2  #!/usr/bin/env python
3
4  import unittest
5  from services import CustomerService
6  from models import Customer
100 % 0 2 ↑ ↓  Ln: 2 Ch: 3
Developer PowerShell ...
+ Developer PowerShell
PS C:\Users\ConsueloRuiz\source\repos\A01795993_A6.2\hotel_system> coverage run -m unittest discover -s tests
>> coverage report -m
.....
Ran 9 tests in 0.013s
OK
Name          Stmts  Miss  Cover   Missing
-----
models.py      17      0  100%
services.py    65     12  82%  43-44, 61-62, 84-86, 98-102
storage.py     24      7  71%  25-26, 34-36, 44-45
tests\test_customer.py 12      0  100%
tests\test_hotel.py   38      0  100%
tests\test_reservation.py 12      0  100%
-----
TOTAL          168     19  89%
PS C:\Users\ConsueloRuiz\source\repos\A01795993_A6.2\hotel_system>
```

## flake8

The screenshot shows a terminal window with two tabs: "Developer PowerShell" and "Developer PowerShell". The "Developer PowerShell" tab contains the following command and its output:

```
PS C:\Users\ConsueloRuiz\source\repos\A01795993_A6.2\hotel_system> python3 -m flake8 .
```

The output shows the results of the flake8 analysis across several files:

Name	Stmts	Miss	Cover	Missing
models.py	17	0	100%	
services.py	65	12	82%	43-44, 61-62, 84-86, 98-102
storage.py	24	7	71%	25-26, 34-36, 44-45
tests\test_customer.py	12	0	100%	
tests\test_hotel.py	38	0	100%	
tests\test_reservation.py	12	0	100%	

TOTAL 168 19 89%

PS C:\Users\ConsueloRuiz\source\repos\A01795993\_A6.2\hotel\_system> ^C

PS C:\Users\ConsueloRuiz\source\repos\A01795993\_A6.2\hotel\_system> python3 -m flake8 .

.\tests\test\_hotel.py:51:58: W292 no newline at end of file

PS C:\Users\ConsueloRuiz\source\repos\A01795993\_A6.2\hotel\_system> python3 -m flake8 .

PS C:\Users\ConsueloRuiz\source\repos\A01795993\_A6.2\hotel\_system>

## pylint models.py storage.py services.py

The screenshot shows a terminal window with two tabs: "Developer PowerShell" and "Developer PowerShell". The "Developer PowerShell" tab contains the following command and its output:

```
PS C:\Users\ConsueloRuiz\source\repos\A01795993_A6.2\hotel_system> pylint models.py storage.py services.py
```

The output shows the results of the pylint analysis across several files:

Name	Stmts	Miss	Cover	Missing
storage.py	24	7	71%	25-26, 34-36, 44-45
tests\test_customer.py	12	0	100%	
tests\test_hotel.py	38	0	100%	
tests\test_reservation.py	12	0	100%	

TOTAL 168 19 89%

PS C:\Users\ConsueloRuiz\source\repos\A01795993\_A6.2\hotel\_system> ^C

PS C:\Users\ConsueloRuiz\source\repos\A01795993\_A6.2\hotel\_system> python3 -m flake8 .

.\tests\test\_hotel.py:51:58: W292 no newline at end of file

PS C:\Users\ConsueloRuiz\source\repos\A01795993\_A6.2\hotel\_system> python3 -m flake8 .

PS C:\Users\ConsueloRuiz\source\repos\A01795993\_A6.2\hotel\_system> ^C

Your code has been rated at 10.00/10 (previous run: 10.00/10, +0.00)

PS C:\Users\ConsueloRuiz\source\repos\A01795993\_A6.2\hotel\_system>

## Corrida del Sistema:

The screenshot shows a code editor with several tabs at the top: test\_reservation.py, test\_hotel.py, test\_customer.py, storage.py, services.py, and models.py. The test\_reserve\_room.py tab is active, displaying Python test code. Below the editor is a developer PowerShell terminal window.

```
test_reservation.py      test_hotel.py  test_customer.py    storage.py   services.py  models.py
test_reserve_room
45
46
47
48
49
50
51
52
result = self.service.get_hotel("H9")
self.assertEqual(result["available_rooms"], 0)
def test_cancel_reservation_no_hotel(self):
    self.service.cancel_reservation("NO_EXIST")
    self.assertEqual(self.service.storage.load(), [])
100 %  0  ▲ 2  ↑  ↓  <  ▶  Ln: 52 Ch: 9 SPC
Developer PowerShell
+ Developer PowerShell  |  |
PS C:\Users\ConsueloRuiz\source\repos\A01795993_A6.2\hotel_system> ^C
PS C:\Users\ConsueloRuiz\source\repos\A01795993_A6.2\hotel_system> python
Python 3.13.12 (tags/v3.13.12:1cbe481, Feb  3 2026, 18:22:25) [MSC v.1944 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> from services import HotelService
>>>
>>> from models import Hotel
>>>
>>>
>>> service = HotelService()
>>>
>>> hotel = Hotel("H100", "Hotel Demo", 10, 10)
>>>
>>> service.create_hotel(hotel)
>>>
>>> print(service.get_hotel("H100"))
{'hotel_id': 'H100', 'name': 'Hotel Demo', 'total_rooms': 10, 'available_rooms': 10}
```