Lab 2.1 Python Development Exercises

Goal: The target of these exercises is to enable the student to practice and master programming skills during the course.

Instructions: You are required to submit programming assignments. More practice, more mastery. You must upload a PDF version of your source code and screen images for the tests execution as evidence of your work for these exercises.

Rubric Evaluation:

- Complete functionality – 40%
- Correct functionality – 30%
- Complete test cases – 30 %

Programming Exercise	Description	Test Cases
4 – Python Failing	You need to create two functions to substitute str() and int(). A function called int_to_str() that converts integers into strings and a function called str_to_int() that converts strings into integers. ## Examples: ``` int_to_str(4) → "4" str_to_int("4") → 4 int_to_str(29348) → "29348" ```	Provide 10 test cases for each function

5- Profit	You work for a manufacturer, and have been asked to calculate the total profit made on the sales of a product. You are given a dictionary containing the *cost price per unit* (in dollars), *sell price per unit* (in dollars), and the *starting inventory*. Return the total **profit** made, rounded to the nearest dollar.
	
	## Examples
	
	``
	profit({
	  "cost_price": 32.67,
	  "sell_price": 45.00,
	  "inventory": 1200
	}) → 14796
	``
		Provide 10 test cases

```
profit({
  "cost_price": 225.89,
  "sell_price": 550.00,
  "inventory": 100
}) ➞ 32411

profit({
  "cost_price": 2.77,
  "sell_price": 7.95,
  "inventory": 8500
}) ➞ 44030
```

Notes

- Assume all inventory has been sold.
- Profit = Total Sales - Total Cost