Assignment 7.3

# task1: Paste a function with a missing colon (add(a, b)), and let AI fix the syntax error

# Output:

def add(a,b):

  return a+b

# task 2: Identify and fix a logic error in a loop that causes infinite iteration

def count\_down(n):

  while n>=0:

    print(n)

    n+=1

# output:

def count\_down(n):

  while n>=0:

    print(n)

    n-=1

# Task 3: Debug a runtime error caused by division by zero. Let AI insert try-except.

# Output:

def divide(a,b):

  if b == 0:

    return "Error: Division by zero is not allowed."

  return a/b

print(divide(10,0))

Error: Division by zero is not allowed.xxxxxx

# Task 4: Provide a faulty class definition (missing self in parameters). Let AI fix it

class rectangle:

  def \_\_init\_\_(length,width):

    self.length=length

    self.width=width

# output:

class rectangle:

  def \_\_init\_\_(self, length, width):

    self.length = length

    self.width = width

# Task 5: Access an invalid list index and use AI to resolve the Index Error.

num=[1,2,3]

print(num[5])

IndexError Traceback (most recent call last)

[/tmp/ipython-input-648419311.py](https://localhost:8080/) in <cell line: 0>()

**1** num=[1,2,3]

----> 2 print(num[5])

IndexError: list index out of range

# Output:

num=[1,2,3]

print(num[0])