**Assignment 2 – Solution**

Write a NumPy function that accepts two 1-D arrays of equal length and returns a new array containing the product of the corresponding elements in the input arrays.

import numpy as np

def multiply\_arrays(arr1, arr2):

    """

    Accepts two 1-D arrays of equal length and returns a new array containing

    the product of the corresponding elements in the input arrays.

    """

    # make sure that the two arrays have the same length

    assert len(arr1) == len(arr2), "The two arrays must have the same length."

    # multiply the corresponding elements in the two arrays

    result = arr1 \* arr2

    # return the result as a new array

    return result

# create two 1-D arrays of equal length

arr1 = np.array([1, 2, 3])

arr2 = np.array([4, 5, 6])

# call the multiply\_arrays function to multiply the two arrays

result = multiply\_arrays(arr1, arr2)

# print the result

print(result)