10/6/24, 5:48 PM Lambda Functions

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In [1]: #Addition of Two Numbers
        add = lambda x, y: x + y
        result = add(5, 3)
        print("Addition Result:", result)
       Addition Result: 8
In [2]: #Lambda Functions with Built-in Functions Like map, filter, and reduce
        numbers = [1, 2, 3, 4, 5]
        squared_numbers = list(map(lambda x: x**2, numbers))
        print("Squared Numbers:", squared_numbers)
       Squared Numbers: [1, 4, 9, 16, 25]
In [3]: #Using filter() with Lambda Functions
        even_numbers = list(filter(lambda x: x % 2 == 0, numbers))
        print("Even Numbers:", even_numbers)
       Even Numbers: [2, 4]
In [4]: #Using reduce() with Lambda Functions
        from functools import reduce
        product = reduce(lambda x, y: x * y, numbers)
        print("Product of Numbers:", product)
       Product of Numbers: 120
In [5]: #Comparing Lambda Functions with Regular Functions
        def add_numbers(x, y):
            return x + y
        add_lambda = lambda x, y: x + y
        result_regular = add_numbers(10, 5)
        result_lambda = add_lambda(10, 5)
        print("Regular Function Result:", result_regular)
        print("Lambda Function Result:", result_lambda)
       Regular Function Result: 15
       Lambda Function Result: 15
In [ ]:
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