**Following are five examples for each of the Python functions: filter(), map(), and lambda():**

**filter():**

1. To Filter out even numbers from a list, we can use filter() function:

numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

odd\_numbers = list(filter(lambda x: x % 2 != 0, numbers))

print(odd\_numbers)

1. To Filter words that start with a specific letter , we can use filter() function:

words = ['apple', 'banana', 'cherry', 'date', 'elderberry', 'fig']

a\_words = list(filter(lambda word: word[0] == 'a', words))

print(a\_words)

1. To Filter out negative numbers

numbers = [-5, -3, -1, 0, 2, 4, 6]

positive\_numbers = list(filter(lambda x: x > 0, numbers))

print(positive\_numbers)

1. To Filter a list of dictionaries based on a specific key-value pair, we can use filter() function:

people = [{'name': 'Alice', 'age': 25}, {'name': 'Bob', 'age': 30}, {'name': 'Charlie', 'age': 35}]

young\_people = list(filter(lambda person: person['age'] < 30, people))

print(young\_people) , we can use filter() function:

1. To Filter a list of strings based on their length, we can use filter() function:

strings = ['hello', 'world', 'python', 'programming']

long\_strings = list(filter(lambda s: len(s) > 5, strings))

print(long\_strings)

**map()**

1. To Square each number in a list, we can use map() function:

numbers = [1, 2, 3, 4, 5]

squared\_numbers = list(map(lambda x: x\*\*2, numbers))

print(squared\_numbers)

1. To Convert a list of strings to uppercase, we can use map() function:

strings = ['apple', 'banana', 'cherry']

uppercase\_strings = list(map(lambda s: s.upper(), strings))

print(uppercase\_strings)

1. To Add a fixed value to each element in a list, we can use map() function:

numbers = [1, 2, 3, 4, 5]

added\_numbers = list(map(lambda x: x + 10, numbers))

print(added\_numbers)

1. To get the length of each string in a list, we can use map() function:

strings = ['apple', 'banana', 'cherry']

string\_lengths = list(map(lambda s: len(s), strings))

print(string\_lengths)

1. To convert a list of strings to integers, we can use map() function:

strings = ['1', '2', '3']

integers = list(map(lambda s: int(s), strings))

print(integers)

**lambda()**

1. To find Simple square of a number, we can use lambda() function:

square = lambda x: x\*\*2

print(square(5))

1. To filter out even numbers from a list:

numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

odd\_numbers = list(filter(lambda x: x % 2 != 0, numbers))

print(odd\_numbers)

1. To add two numbers, we can use lambda () function:

add = lambda x, y: x + y

print(add(5, 10))

1. To sort a list of strings based on their length, we can use lambda() function:

strings = ['apple', 'banana', 'cherry']

sorted\_strings = sorted(strings, key=lambda s: len(s))

print(sorted\_strings)

1. To multiply each element in list by a fixed value, we can use Lambda function:

numbers = [1, 2, 3, 4, 5]

multiplied\_numbers = list(map(lambda x: x \* 10, numbers))

print(multiplied\_numbers)