

Senjuti Maiti
19S-221

Question 1 :

Source Code:

```
nums1 = [1, 2, 3]
nums2 = [4, 5, 6]
print("Original list:")
print(nums1)
print(nums2)
result1 = map(lambda x, y: x - y, nums1, nums2)
result = map(lambda x, y: x + y, nums1, nums2)
print("\nResult: after adding two list")
print(list(result))
print("\nResult: after subtracting two list")
print(list(result1))
```

Output:

==== RESTART: C:/Users/admin/AppData/Local/Programs/Python/Python39/map1.py ====

Original list:

[1, 2, 3]

[4, 5, 6]

Result: after adding two list

[5, 7, 9]

Result: after subtracting two list

[-3, -3, -3]

>>>

Question 2:

Source Code:

s = 0

Senjuti Maiti
19S-221

```
def sum(x):  
    global s  
    s = s + x  
r = list(map(lambda x: sum(x),range(10)))  
print(s)
```

Output:

```
==== RESTART: C:/Users/admin/AppData/Local/Programs/Python/Python39/map2.py ====  
45  
>>>
```

Question 3

Source Code :

```
array_nums1 = [1, 2, 3, 5, 7, 8, 9, 10]  
array_nums2 = [1, 2, 4, 8, 9]  
print("Original arrays:")  
print(array_nums1)  
print(array_nums2)  
result = list(filter(lambda x: x in array_nums1, array_nums2))  
print ("\nIntersection of the said arrays: ",result)
```

Output:

```
==== RESTART: C:/Users/admin/AppData/Local/Programs/Python/Python39/map3.py ====  
Original arrays:  
[1, 2, 3, 5, 7, 8, 9, 10]  
[1, 2, 4, 8, 9]
```

Intersection of the said arrays: [1, 2, 8, 9]

```
>>>
```

Question 4:

Source Code:

Senjuti Maiti
19S-221

```
texts = ["php", "mom", "Python", "abcd", "Java", "aaa"]  
print("Orginal list of strings:")  
print(texts)  
result = list(filter(lambda x: (x == "".join(reversed(x))), texts))  
print("\nList of palindromes:")  
print(result)
```

Output:

```
==== RESTART: C:/Users/admin/AppData/Local/Programs/Python/Python39/map4.py ====
```

Orginal list of strings:

```
['php', 'mom', 'Python', 'abcd', 'Java', 'aaa']
```

List of palindromes:

```
['php', 'mom', 'aaa']
```

```
>>>
```