

## Ass 3 (2)

August 10, 2023

```
[ ]: [1.] below
```

```
[2]: lst = [('Sachin Tendulkar', 34357), ('Ricky Ponting', 27483), ('Jack Kallis', 25534), ('Virat Kohli', 24936)]
```

```
lst.sort(key=lambda x: x[1])
```

```
print(lst)
```

```
[('Virat Kohli', 24936), ('Jack Kallis', 25534), ('Ricky Ponting', 27483), ('Sachin Tendulkar', 34357)]
```

```
[ ]: [2.]
```

```
[1]: nums = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
```

```
squares = list(map(lambda x: x**2, nums))
```

```
print(squares)
```

```
[1, 4, 9, 16, 25, 36, 49, 64, 81, 100]
```

```
[ ]: [3.]
```

```
[2]: nums = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
```

```
strings_tuple = tuple(map(lambda x: str(x), nums))
```

```
print(strings_tuple)
```

```
('1', '2', '3', '4', '5', '6', '7', '8', '9', '10')
```

```
[ ]: [4.]
```

```
[4]: from functools import reduce
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```
numbers = list(range(1, 26))
```

```
multiply = lambda x, y: x * y

product = reduce(multiply, numbers)

print(product)
```

15511210043330985984000000

[ ]: [5.]

```
[5]: numbers = [2, 3, 6, 9, 27, 60, 90, 120, 55, 46]

divisible_by_2_and_3 = lambda x: x % 2 == 0 and x % 3 == 0

filtered_numbers = list(filter(divisible_by_2_and_3, numbers))

print(filtered_numbers)
```

[6, 60, 90, 120]

[ ]: [6.]

```
[6]: strings = ['python', 'php', 'aba', 'radar', 'level']

is_palindrome = lambda x: x == x[::-1]

palindromes = list(filter(is_palindrome, strings))

print(palindromes)
```

['php', 'aba', 'radar', 'level']

[ ]: