

In [ ]: AAIGNMENT- 4TH FEB

## # Sort a list of tuples based on integer value using a lambda function

```
In [1]: data = [('Sachin Tendulkar', 34357), ('Ricky Ponting', 27483), ('Jack Kallis', 25534), ('Virat Kohli', 24936)]

sorted_data = sorted(data, key=lambda x: x[1])
print(sorted_data)
```

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

In [ ]: Find the squares of all the numbers in the given list using lambda and map functions

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

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

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

In [ ]: Convert the given list of integers into a tuple of strings using map and lambda functions

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

converted_tuple = tuple(map(lambda x: str(x), numbers))
print(converted_tuple)
```

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

In [ ]: Compute the product of a list containing numbers from 1 to 25 using the reduce function

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In [4]: from functools import reduce

numbers = list(range(1, 26))

product = reduce(lambda x, y: x * y, numbers)
print(product)
```

```
15511210043330985984000000
```

In [ ]: Filter the numbers in a given list that are divisible by 2 and 3 using the filter function

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

        filtered_numbers = list(filter(lambda x: x % 2 == 0 and x % 3 == 0, numbers))
        print(filtered_numbers)
```

```
[6, 60, 90, 120]
```

```
In [ ]: Find palindromes in the given list of strings using lambda and filter function
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```
In [6]: strings = ['python', 'php', 'aba', 'radar', 'level']

        palindromes = list(filter(lambda x: x == x[::-1], strings))
        print(palindromes)
```

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

```
In [ ]:
```