

Assignment 1

1. Clean Product Names

```
products = [" LAPTOP ", "phone ", " Tablet", "CAMERA "]  
cleaned_products = list(map(lambda p: p.strip().title(), products))  
print("Cleaned Products:", cleaned_products)
```

2. Celsius → Fahrenheit

```
celsius = [0, 10, 20, 30, 40]  
fahrenheit = list(map(lambda c: (9/5)*c + 32, celsius))  
print("Fahrenheit:", fahrenheit)
```

3. Square then Add 10

```
nums = [1, 2, 3, 4, 5]  
transformed_nums = list(map(lambda n: n*n + 10, nums))  
print("Transformed Numbers:", transformed_nums)
```

4. First and Last Characters

```
words = ["python", "lambda", "programming", "map", "function"]  
first_last = list(map(lambda w: (w[0], w[-1]), words))  
print("First & Last Characters:", first_last)
```

5. Increase marks by 5% + round

```
marks = [[45, 80, 70], [90, 60, 100], [88, 76, 92]]  
updated_marks = list(map(lambda row: list(map(lambda x: round(x * 1.05), row)), marks))  
print("Updated Marks:", updated_marks)
```

6. Normalize list between 0 and 1

```
numbers = [10, 25, 40, 55, 70]
```

```
mn, mx = min(numbers), max(numbers)
```

```
normalized = list(map(lambda x: (x - mn) / (mx - mn), numbers))
```

```
print("Normalized:", normalized)
```

7. Length of each word in each sentence

```
sentences = [
```

```
    "hello world",
```

```
    "python is fun",
```

```
    "map and lambda"
```

```
]
```

```
lengths = list(map(lambda s: list(map(lambda w: len(w), s.split())), sentences))
```

```
print("Word Lengths:", lengths)
```