

الاسم/اسلام السيد رمزى الغرباوى

سيكشن/1

1 -

```
products = [" LAPTOP ", "phone ", " TABLET", "camera "] clean  
= list(map(lambda p: p.strip().title(), products)) print(clean)
```

Output : ['Laptop', 'Phone', 'Tablet', 'Camera']

2 -

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

Output : [32.0, 50.0, 68.0, 86.0, 104.0]

3 -

```
nums = [1, 2, 3,4,5]  
result = list(map(lambda x: x**2 + 10, nums)) print(result)
```

Output : [11, 14, 19, 26, 35]

4 -

```
words = ["python", "lambda", "programming", "map", "function"]  
  
first_last_chars = list(map(lambda w: (w[0], w[-1]), words))  
  
print(first_last_chars)
```

Output : [('p', 'n'), ('l', 'a'), ('p', 'g'), ('m', 'p'), ('f', 'n')]

5 -

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

Output : [[47, 84, 74], [95, 63, 105], [92, 80, 97]]

6 -

```
nums = [10, 20, 30, 40, 50]  
  
mn = min(nums) mx =  
  
max(nums)  
  
normalized = list(map(lambda x: (x - mn) / (mx - mn), nums))  
  
print(normalized)
```

Output : [0.0, 0.25, 0.5, 0.75, 1.0]

7 -

```
sentences = [
```

```
"I love programming",
```

```
    "Lambda functions are powerful",
```

```
    "Python makes tasks easier"
```

```
]
```

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

```
print(lengths)
```

Output : [[1, 4, 11],[6, 9, 3, 8],[6, 5, 5, 6]]