lambda function

A **lambda function** is a small, anonymous function in Python that is defined using the lambda keyword instead of the def keyword.

- Lambda functions can have any number of arguments
- but only one expression,
  - which is evaluated and returned.
- Used for short, simple operations where defining a full function would be unnecessary.

The syntax for a lambda function is:

```python
lambda arguments: expression
```

```python
# A regular function to add two numbers
def add(x, y):
    return x + y

# The same function as a lambda function
add_lambda = lambda x, y: x + y

# Using the lambda function
result = add_lambda(2, 3)   # Output: 5
```

```python
# lambda function
add_lambda = lambda x, y: x + y
```
[4] ✓ 0.0s

```python
add_lambda(6,5)
```
[5] ✓ 0.0s

...   11

```python
number = [6,5,2,3,4,6,1,2]
# lambda function
squared_numbers = map(lambda x: x**2, number)
print(list(squared_numbers))
```
[16] ✓ 0.0s

...   [36, 25, 4, 9, 16, 36, 1, 4]

```python
number = [6,5,2,3,4,6,1,2]
# lambda function
cube_numbers = map(lambda x: x**3, number)
print(list(cube_numbers))
```

[17]   ✓   0.0s

[216, 125, 8, 27, 64, 216, 1, 8]