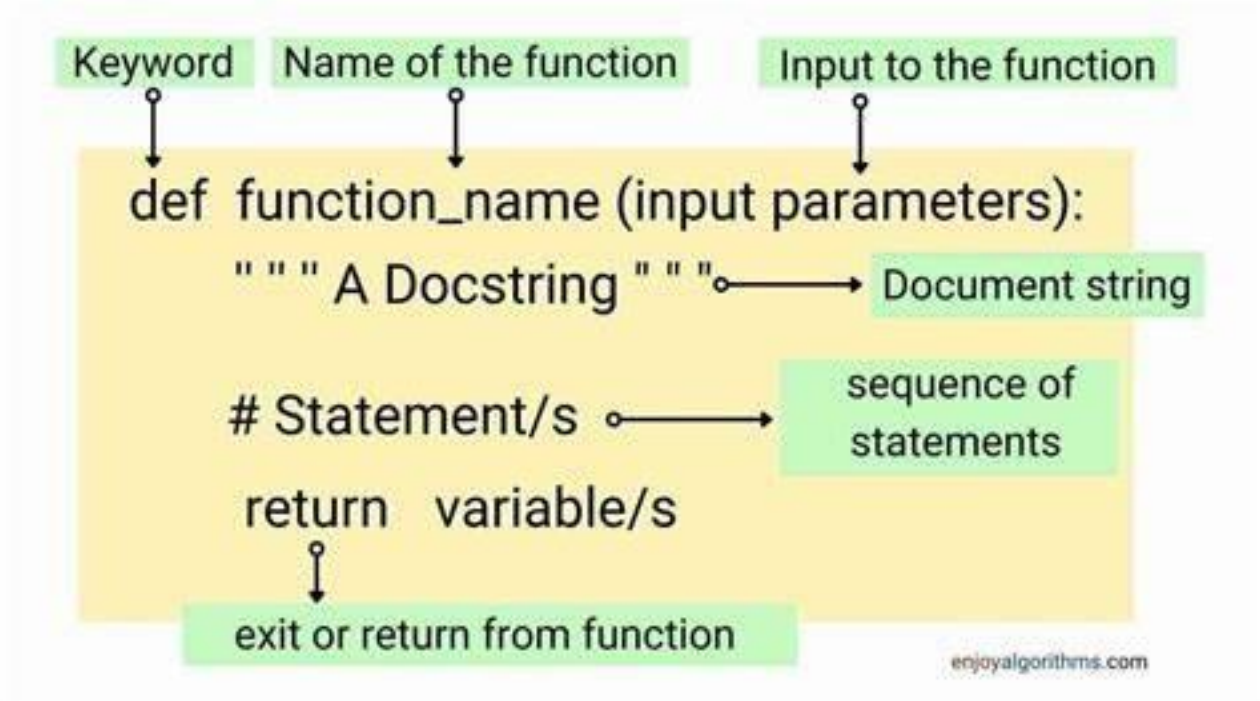
Artificial Intelligence (Machine Learning & Deep Learning) [Course]

Week 2 - Day 1

[See examples / code in GitHub code repository]

It is not about Theory, it is 20% Theory and 80% Practical – Technical/Development/Programming [Mostly Python based]

Functions



- Types of Python Functions:
- (Built-in functions , Functions defined in built-in modules, User-defined funct
  Pass by Reference vs Value

References:

https://www.w3schools.com/python/python_functions.asp
https://www.geeksforgeeks.org/python-functions/
https://www.tutorialspoint.com/python/python_functions.htm

File Operations

Python File Handling

1. Create Files
2. Read Files
3. Write to Files

1. List Files From Directory
2. Copy, Rename, Delete Files from Directory
3. Copy, Delete Directories

```
# Create and Write
with open('test.txt', 'w') as fp:
    fp.write('new line')
# Read
with open('test.txt', 'r') as fp:
    fp.read()
```

```
os.rename('old_file_name', 'new_file_name')
os.remove('file_path')

shutil.copy('src_file_path', 'new_path')
shutil.move('src_file_path', 'new_path')

os.listdir('dir_path') # Get all files
shutil.rmtree('path')  # Remove directory
shutil.copytree('src_path', 'dst_path') # Copy dir
```

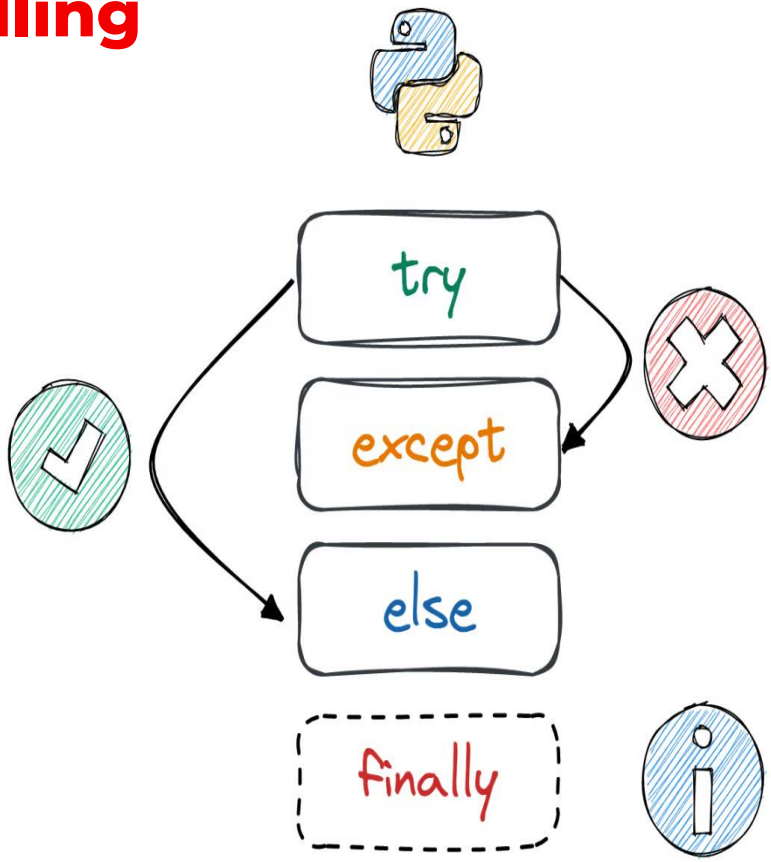
PYnative.com

References:

https://www.geeksforgeeks.org/file-handling-python/
https://www.w3schools.com/python/python_file_handling.asp
https://www.includehelp.com/python/file-handling-programs.aspx

Exercises

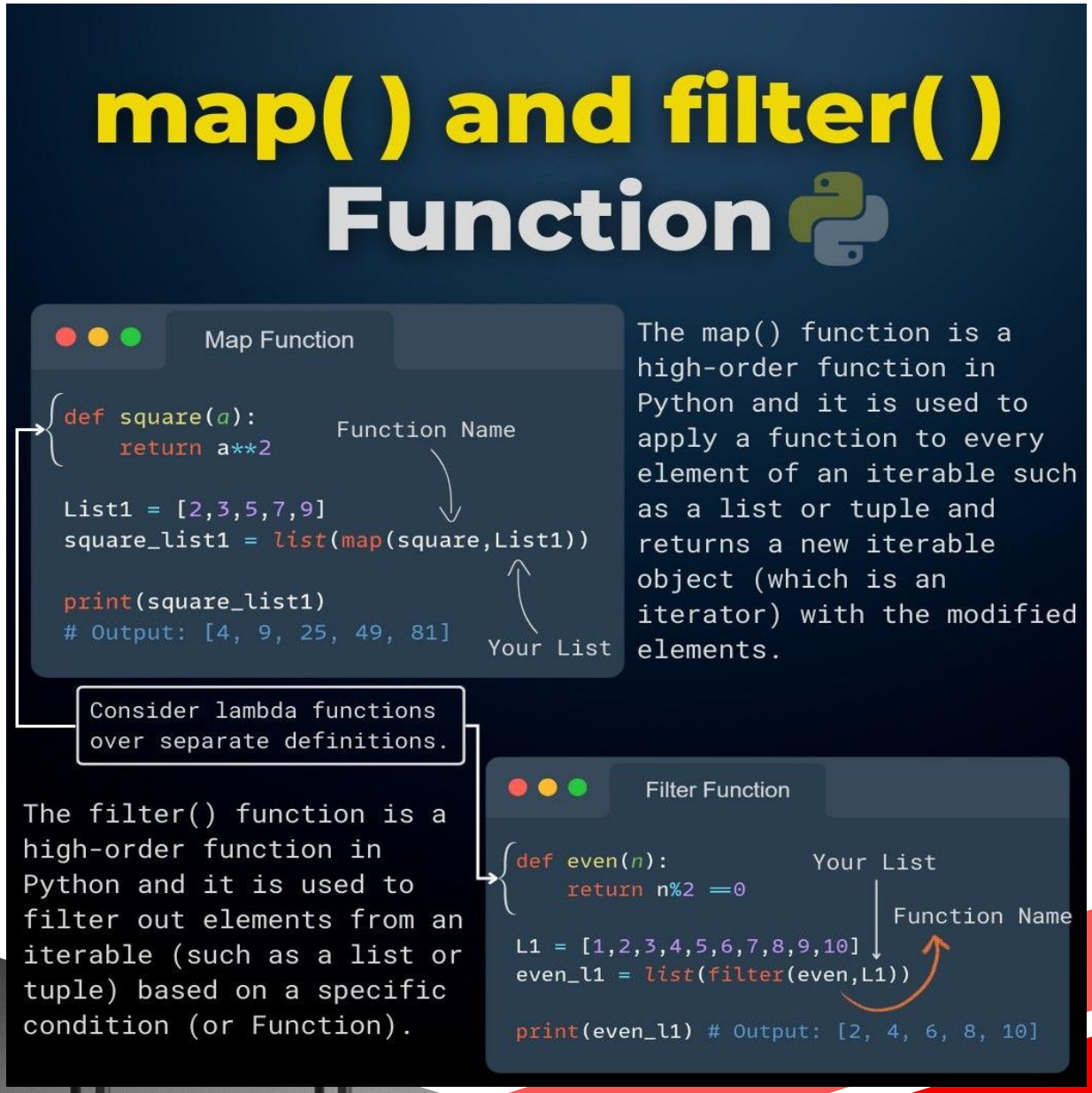
Exception Handling



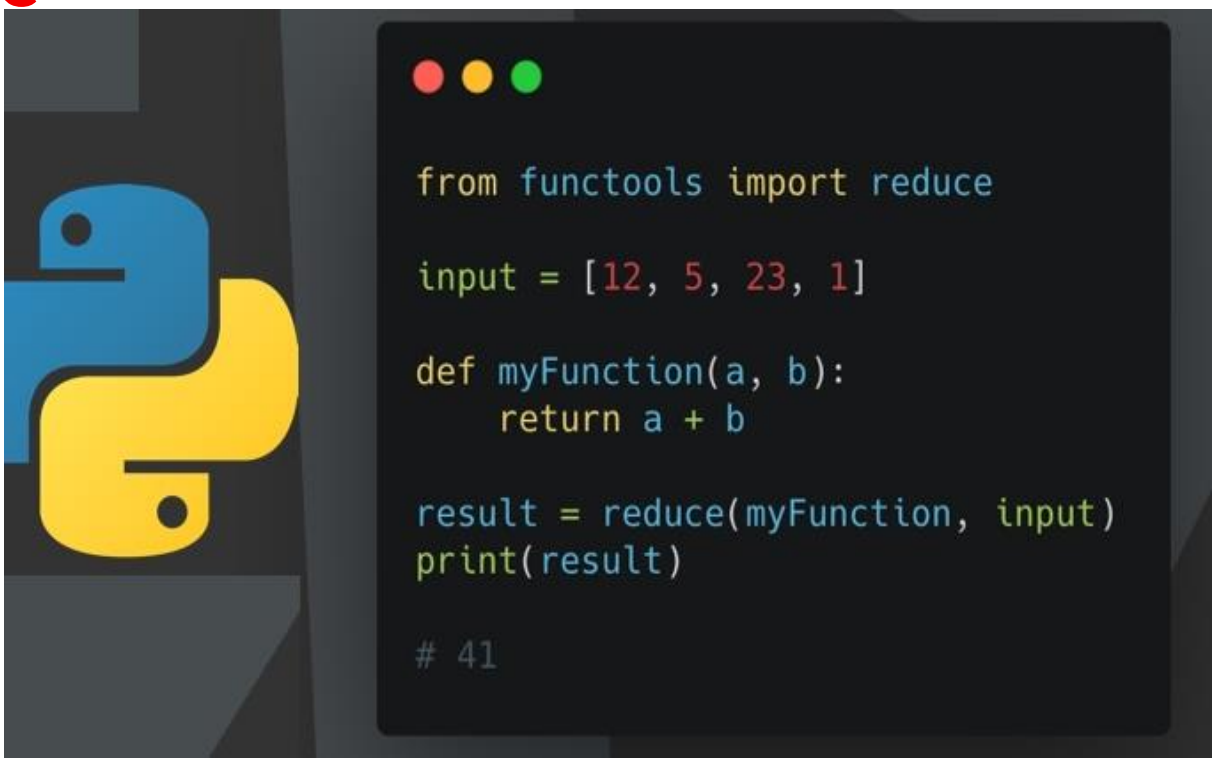
References:

https://www.geeksforgeeks.org/python-exception-handling/
https://www.programiz.com/python-programming/exception-handling
https://python.land/deep-dives/python-try-except

Map and Filter



Reduce



References:

https://www.geeksforgeeks.org/map-reduce-and-filter-operations-in-python/
https://stackabuse.com/map-filter-and-reduce-in-python-with-examples/
https://www.learnpython.org/en/Map,_Filter,_Reduce
https://www.askpython.com/python/built-in-methods/map-vs-filter-function-python

Thank you - for listening and participating

- ❑**Questions / Queries**
- ❑**Suggestions/Recommendation**
- ❑**Ideas…..?**

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