**Python Deep Learning**

**In Class Exercise – I**

1. **Difference between Python 2 vs Python 3?**

### Python 2

Published in late 2000, Python 2 signalled a more transparent and inclusive language development process than earlier versions of Python with the implementation of PEP (Python Enhancement Proposal).

Additionally, Python 2 included many more programmatic features including a cycle-detecting garbage collector to automate memory management, increased Unicode support to standardize characters, and list comprehensions to create a list based on existing lists.

**Python 3**

Python 3 is regarded as the future of Python and is the version of the language that is currently in development. A major overhaul, Python 3 was released in late 2008. The focus of Python 3 development was to clean up the codebase and remove redundancy, making it clear that there was only one way to perform a given task.

Major modifications to Python 3.0 included changing the print statement into a built-in function, improve the way integers are divided, and providing more Unicode support.

## **Key Differences**

Python 2:

**print** "Sammy the Shark is my favorite sea creature"

a = 5 / 2

**print** a

Output

2

python 3:

print("Sammy the Shark is my favorite sea creature")

a = 5 / 2

print(a)

Output

2.5

## **Conclusion**

Python is a versatile and well-documented programming language to learn, and whether you choose to work with Python 2 or Python 3, you will be able to work on exciting software projects.