Distributed Systems
Pre-assignment

You will need some basic knowledge of Python language to program in your labs and run your programs on a distributed system called the Seattle framework. This pre-assignment helps you get familiar with them. Submit your pre-assignment as a ZIP/RAR file in Ping Pong.

1   Python

1. Google offers a basic Python course at `https://developers.google.com/edu/python/`. Visit the course and learn basic Python's features if you are not familiar with it.

2. Finish all three basic exercises in the Google's Python course `https://developers.google.com/edu/python/exercises/basic`, i.e. string1.py, list1.py and wordcount.py. Submit your source code of the functions YOU wrote for each of the exercise in your submission. (Note: We know that the solutions for these exercises are also provided online. However you should do them yourself to practice your Python programming skills, which are required in all the labs).

2   Seattle framework

You can visit `https://seattle.poly.edu/wiki` to get to know the Seattle framework. Its Programmer Portal: `https://seattle.poly.edu/wiki/ProgrammersPage` teaches you how to write a program to run on Seattle, in which you should take the Repy tutorial.

Answer the following questions about the Seattle framework:

1. What is Seattle?

2. What is a vessel in the Seattle framework?

3. Which programming language is used to write programs to run on Seattle? How does it relate to Python? Explain brie y why it is used, instead of Python.

4. Write the full command to run locally a program written in the language in the previous question?

5. List all steps to run a program remotely in vessels.

6. In the HelloWorld Example in the Repy tutorial (see `https://seattle.poly.edu/wiki/RepyTutorial`), what is this line "listencommhandle = waitforconn(ip,port,hello)" for?