# **CSP203: Software Tools & Technologies Lab**

## **Lab-13: Practice Problems (GNUPLOT)**

Date: 22-October-2024

### Instructions:

- 1. You should complete lab problems during the lab hour and submit it through canvas.
- 2. Prepare all your solution files in a zip file and name it as <ROLLNO.zip> and submit on canvas

### Problem-0:

- 1. Set up gnuplot. Learn how to set up and install it on your laptop.
- 2. Understand the demo codes discussed in the class. Execute them and ensure they give the correct output.

### Problem-1:

1. Create a simple data that has marks obtained for 3 students in various courses, as shown below

Course	Student1	Student2	Student3
CS100	77	56	99
CS101	45	34	77
CS102	97	68	24
CS103	22	89	38
CS104	72	96	88

Write gnuplot script to visualize the data in

- (1) Linespoints
- (2) Histogram
- (3) Stacked Histogram

#### Problem-2:

1. Write a shell script that takes the following input from the user StudentName (without spaces), CourseID, Marks.

The above marks have to be obtained for 5 courses, 3 students. Your shell script should save the information in the "marks.data" file, as shown in the Problem-1.

- 2. Write a latex document with appropriate title that should have
  - a. The above Table
  - b. Three plots that you have generated
  - c. A simple text that refers to the figures