

CSP203: Software Tools & Technologies Lab

Lab-15: Practice Problems

Date: 11-Nov-2024

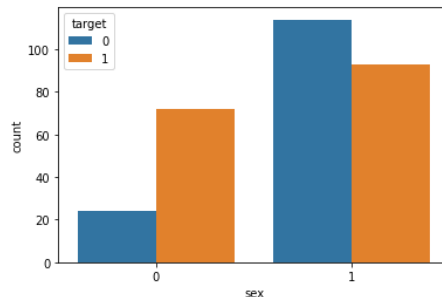
Instructions:

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

Exercises:

1. Download the heart disease dataset from [here](#).
2. Design a shell script that takes the above file as input and produces a latex (tex file) document producing a table. Your generated Latex file upon compilation should produce a PDF containing the table.
3. Create a git repository for your code and continuously push your changes after completing the below problems one at a time.
4. Generate gnuplot scripts to visualize the data as the following.

- a. Plot a histogram of gender vs number of people having heart disease. For example.



- b. Draw the correlation between Age (x-axis) vs Blood pressure (y-axis). Using points data.
 - c. Draw the correlation between Age (x-axis) vs Cholesterol (y-axis). Using line points for those who do not have heart disease.
 - d. Use a pie chart to show the percentage of age groups that have heart disease. Age groups should be 40-50, 50-60...90-100.
5. Include above plots in your latex document and refer them through some text using labels and references.